DoD Prescribing Psychologists: External Analysis, Monitoring, and Evaluation of the Program and its Participants

FINAL REPORT
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ACNP Evaluation Panel Report

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Executive Summary

The Psychopharmacology Demonstration Project (PDP) was undertaken by the Department of Defense (DoD) to determine the feasibility of training military clinical psychologists to prescribe psychotropic drugs safely and effectively. The first class entered the PDP in the Summer of 1991, and the last of four classes graduated in the Summer of 1997. The PDP produced a total of 10 prescribing psychologists who undertook post-graduate assignments at military posts scattered throughout the United States. In January 1998, the DoD contracted with the ACNP to monitor and to provide an independent, external analysis and evaluation of the program and its participants. The ACNP Evaluation Panel was the chief mechanism for performing those functions throughout the program's lifetime. The ACNP Evaluation Panel did its work chiefly by means of frequent, periodic visits to training sites to observe, to interview significant participants, to collect data; providing external assessment of effectiveness and implementation of the PDP program.

In March and April 1998 the Evaluation Panel site visited all graduates of the program. Some had completed their formal PDP training almost four years earlier, and some were only nine months into the post-graduate period. This report includes much detail about the 10 graduates, the 10 sites of their assignments, and the 10 positions they filled. Our Findings and Conclusions, however, have reached beyond the individual. We examined the PDP as one particular training program and correlated its characteristics with its outcomes, as represented in the collective performances of the cohort of graduates. After the Findings and Conclusions section below, an Introduction and a Brief History of the PDP provide short, detailed accounts of the PDP and the role, influence, and history of the ACNP and the ACNP Evaluation Panel. Next, is a Methodology of the 1998 ACNP Evaluation. Last, is a lengthy section that comprises the bulk of the report, 1998 Practice Profiles of the 10 Graduates. These Profiles report in detail the observations and findings of the 10 site visits. They are presented in sequence by service beginning with Air Force (three graduates), followed by Army (three graduates), then Navy (four graduates). Although there were three female graduates, only masculine pronouns are used to protect identity.

Findings and Conclusions

1. *Effectiveness:* All 10 graduates of the PDP filled critical needs, and they performed with excellence wherever they were placed. It was striking to the Evaluation Panel how the graduates had filled different niches and brought unique perspectives to their various assignments. For example, a graduate at one site worked full time on an inpatient unit with his supervising psychiatrist. The psychiatrist said he preferred working with the graduate rather than with another psychiatrist because the prescribing psychologist contributed a behavioral,

nonphysician, psychological perspective he got from no one else. On posts where there was a shortage of psychiatrists, the graduates tended to work side-by-side with psychiatrists, performing many of the same functions a "junior psychiatrist" might perform. In another location, a graduate was based in a psychology clinic but worked largely in a primary care clinic for dependents, thereby providing cost savings for care that otherwise would have been contracted out. Another graduate was the only prescriber for active duty sailors in a psychology clinic that was located near the ships at a naval base. Yet another graduate was to be transferred soon to an isolated base where he will be the only mental health provider. His medical backup will be primary care physicians.

2. *Medical safety and adverse effects*: While the graduates were for the most part highly esteemed, valued, and respected, there was essentially unanimous agreement that the graduates were weaker medically than psychiatrists. While their medical knowledge was variously judged as on a level between 3rd or 4th year medical students, their psychiatric knowledge was variously judged as, perhaps, on a level between 2nd or 3rd year psychiatry residents. Nevertheless, all graduates demonstrated to their clinical supervisors and administrators that they were sensitive and responsive to medical issues. Important evidence on this point is that there have been no adverse effects associated with the practices of these graduates! Thus, they have shown impressively that they knew their own weaknesses, and that they knew when, where, and how to consult. The Evaluation Panel agreed that all the graduates were medically safe by this standard. In a few quarters, the criterion for "medical safety" was equated with the knowledge and experience acquired from completing medical school and residency, and, of course, no graduate of the PDP could meet such a test.

3. *Outstanding individuals:* One indicator of the quality and the success of this group of graduates was that eight out of 10 were serving as chiefs or assistant chiefs of an outpatient psychology clinic or a mental health clinic. Two of these chiefs completed their PDP training less than a year earlier. Other indicators of quality and achievement that characterized this cohort were present when they entered the program. They all had not only a doctorate in clinical psychology but also clinical experience that ranged from a few to more than 10 years. All but two had military experience. The characteristics that led to these accomplishments showed again in that this cohort overcame their limited background in traditional scientific prerequisites for medical school. They certainly suggested that the selection standards should be high, indeed, for candidates for any future prescribing psychologist training, be it military or civilian. The opinion of the Evaluation Panel was that the history of the PDP has established that any program with comparable aims must be a post-doctoral program.

4. *Should the PDP be emulated?* There was discussion at many sites about political pressures in the civilian sector for prescription privileges for psychologists. Virtually all graduates of the PDP considered the "short-cut" programs proposed in various quarters to be ill-advised. Most, in fact, said they favored a 2-year program much like the PDP program conducted at Walter Reed Army Medical Center, but with somewhat more tailoring of the didactic training courses to the special needs, and skills of clinical psychologists. Most said an intensive full-time year of clinical experience, particularly with inpatients, was indispensable. The Evaluation Panel heard much skepticism from psychiatrists, physicians, and some of the graduates about whether prescribing psychologists could safely and effectively work as

independent practitioners in the civilian sector. The usual argument was that the team practice that characterized military medicine was an essential ingredient in the success of the PDP that could not be duplicated in the civilian world. The Evaluation Panel urged the graduates collectively to produce their own consensus view on what would constitute an optimal program.

5. *Relationships with psychiatry:* Six graduates worked in close, gratifying, and harmonious partnerships with psychiatrists, one in an inpatient setting and the others in outpatient units. A seventh graduate had a similar, but more business-like pattern. The psychiatrists in these partnerships were very competent pharmacotherapists. The remaining three graduates were somewhat isolated from psychiatrists with psychopharmacological expertise. One graduate was an independent provider who directed a military division clinic, and, while the clinic had a staff psychiatrist, he was less experienced in psychopharmacology than the graduate--and openly admitted this. Their relationship also was somewhat strained. The other two graduates worked in very busy settings with other psychologists in one case and with primary physicians in the other. Each treated many patients with medication. Each had an expert proctor who was available by phone, page, and e-mail, but not first hand. Although both were only nine months out of the PDP, and they were doing excellent work by all accounts, the Evaluation Panel believed as a matter of principle that they would benefit more from the experience of closer daily liaison with an expert practitioner.

6. *Scope of practice and formulary*: The practice of pharmacotherapy was restricted to adults age 18-65 for all graduates.. Six graduates had no significant formulary restrictions even though there were slight formulary variations among them. The Navy was most restrictive: One graduate who was completing a third year of proctorship could not prescribe lithium or a number of new agents. Another prescribing psychologist was the most restricted of all graduates. He could treat only active duty patients even though dependents and retirees attended his clinic, and he could not prescribe lithium, depakote, and some newer antipsychotics. The Evaluation Panel considered his restrictions unfounded and unreasonable. A few graduates' formularies comprised lists of specific agents instead of drug classes, and it was difficult to effect changes. The MAOIs were the most common exclusions, being included on only one graduate's formulary. It seemed to the Panel that most of the exclusions derived from someone's untoward local experience, and not from judgments about the graduate's competence. Most graduates regarded the current formulary restrictions as no more than minor nuisances.

7. *Psychologist extenders*: The PDP was not designed to replace psychiatrists or produce mini-psychiatrists or psychiatrist extenders, and it did not do so. Instead, the program "products" were extended psychologists with a value-added component prescriptive authority provides. They continued to function very much in the traditions of clinical psychology (psychometric tests, psychological therapies) but a body of knowledge and experience was added that extended their range of competence.

8. *Psychopharmacology educators*: An unexpected benefit of the PDP was the extent to which the graduates contributed to the training of psychology interns. At every site where graduates were in contact with interns, they had initiated teaching sessions, seminars, or courses in psychopharmacology. At two sites the comments emphasized that the teaching was far better than that provided by psychiatry which tended to be either too abstruse or too glib about the

subject. The graduates knew better where to pitch the level of discourse because they better understood the perspective of the psychology interns. Several of the graduates were active in teaching clinical psychopharmacology to residents and other physicians.

9. *Career impact*: Unfortunately, many graduates appeared likely to leave the service in the near future because of being passed over for promotion. The career impact of the PDP was complex and hard to evaluate. Promotion odds seemed to depend in part on whether one joined the PDP shortly before or well in advance of promotion opportunities. Whatever the reason, departure from service terminates further assessment of outcome (within the service). Those who remain in the service should be monitored annually to maximize the information which can be obtained from the PDP.

10. *Variety vs. restriction of caseload:* Three graduates had practices that included 90-100% active duty personnel, two had 15-20%. Two graduates treated 60-80% dependents. Three graduates saw no retired personnel, two saw 20-30%, and one had 75% retirees or spouses in his practice. With the exception of one graduate who treated inpatients exclusively, the large majority of the pharmacotherapy patients of the others had disorders in the adjustment, anxiety, and depression disorder spectra. Not surprisingly, the medicines they used were mostly the newer antianxiety and antidepressant agents, especially the SSRIs. On another dimension of practice, the proportion of the caseload treated with pharmacotherapy, there also were wide individual differences: Four graduates treated more than 50% of their patients with medication, and three treated 25% or less. The graduates who saw only active duty patients were exposed to the least depth and breadth of psychopathology, and they gained less experience with medications because of pressures against their use with the active duty group. The diagnoses made and the medications prescribed by the graduates were functions of the military outpatient sample. They essentially mirrored what psychiatrists did with the same population, and, in fact, they differed little from the private practices of the psychiatrists on the Evaluation Panel. The Evaluation Panel believed that the clinical and administrative supervisors should make efforts, whenever possible, to help the graduates maintain and sharpen their clinical skills by expanding the diagnostic breadth of their caseload. The increased diversity and range of severity found on the inpatient service make it an important potential site for additional experience. Family and primary practice medical clinics provide other options.

11. *Independent provider vs proctored status*: All graduates were initially proctored by psychiatrists. Half of them had advanced to independent provider status, with its standard minimum review of 10% of medication cases . Interestingly, all members of Group C and one from Group D—the last two classes to complete the PDP—were independent. Two other graduates were de facto independent providers. The clinical supervisor in one case and a department head in the other as a matter of principle and philosophy would not propose independent provider status for any prescribing psychologist. These two graduates were members of Groups A and B—one Navy, one AF—and each had been proctored for three years. Both were soon to attain "independence by transfer" through reassignment to sites that had no on base psychiatric oversight or backup. The Evaluation Panel viewed these two graduates as no less effective or safe than their peers. They were caught up in the problem of a lack of a DoD-wide agreed upon set of clearly defined steps from 100% supervision to independent practice.

12. *A final comment:* As the preceding synopsis and the following detailed report indicate, the PDP graduates have performed and are performing safely and effectively as prescribing psychologists. Without commenting on the social, economic, and political issues of whether a program such as the PDP should be continued or expanded, it seems clear to the Evaluation Panel that a 2-year program—one year didactic, one year clinical practicum that includes at least a 6-month inpatient rotation—can transform licensed clinical psychologists into prescribing psychologists who can function effectively and safely in the military setting to expand the delivery of mental health treatment to a variety of patients and clients in a cost effective way.

We have been impressed with the work of the graduates, their acceptance by psychiatrists (even while they may have disagreed with the concept of prescribing psychologist), and their contribution to the military readiness of the groups they have been assigned to serve. We have been impressed with the commitment and involvement of these prescribing psychologists to their role, their patients, and the military establishment. We are not clear about what functions the individuals can play in the future, but we are convinced that their present roles meet a unique, very professional need of the DoD. As such, we are in agreement that the Psychopharmacology Demonstration Project is a job well done.

Brief History of the PDP

The Department of Defense (DoD) Psychopharmacology Demonstration Project (PDP) was a Congressionally-mandated pilot demonstration project funded by Congress in 1991 to train military clinical psychologists in the safe and effective prescription of psychotropic medications under certain circumstances to eligible beneficiaries (between the ages 18 to 65 years) of the Military Health System (MHS), pursuant to section 8097 of the DoD Appropriations Act for Fiscal Year 1992. This mandate was preceded by Congressional interest first expressed in December 1987 to the Assistant Secretary of Defense of Health Affairs (ASDHA), and later expressed in a Conference Report dated September 28, 1988, which accompanied the DoD Appropriations Act (P.L. 100-463) for FY 1989. The Congressional Record (November 13, 1989, II 8361) also noted how in the DoD Appropriations Act, 1989, the Senate had directed the DoD "...to make the implementation of a training program for psychologists its highest priority." The Conferees went on to state that the DoD "should establish a demonstration pilot training program under which military psychologists may be trained and authorized to issue appropriate psychotropic medications under certain circumstances." Between 1987 and the implementation of the program in 1992, the directed pilot program underwent intense legal and regulatory review at various levels within the DoD and within the Office of the Surgeon General (OTSG) of the U.S. Army as the executive agent of the demonstration project. Many of the reviews and interactions involved efforts by the DoD to clarify the conditions under which it might be appropriate for psychologists to prescribe medications.

In February 1990 the Army Surgeon General, LTG Ledford, formed a Blue Ribbon panel consisting of representatives from the three services' Surgeons General, OASD(HA), and professional organizations of psychiatrists (American Psychiatric Association), psychologists (American Psychological Association), the American College of Neuropsychopharmacology (ACNP), and other physicians, to determine the best training model and methods. After considering alternatives, the Blue Ribbon Panel ultimately endorsed a 2-year training model that included course work at the Uniformed Services University of Health Sciences (USUHS) followed by 1-year of clinical experience in inpatient and outpatient clinics at Walter Reed Army Medical Center (WRAMC), Site #9, and Site #8. In February 1991, the Chairmen of the Senate and House Subcommittees of the respective Committees on Appropriations, approved the Blue Ribbon Panel's model, and the DoD then formed a Steering Committee that included USUHS faculty and WRAMC staff. The latter included the WRAMC Chief of Psychology, who also served as the PDP Project Director, and the WRAMC Chief of Psychiatry. The Steering Committee's charge was to develop a suitable 2-year postdoctoral fellowship program to provide clinical psychologists with the knowledge required to safely and effectively use a limited formulary of psychotropic medications. The training model was subsequently revised to one year of training and one year of clinical experience.

Time and other constrictions made it impossible initially to offer a 1-year didactic program specifically tailored to the needs of the first group of fellows (Group A, Class of '94). Instead, the PDP program had to be grafted onto the existing 2-year preclinical USUHS Medical School curriculum. At USUHS, as at most US medical schools, the biochemistry-physiology-

pharmacology sequence was spread over two years. This meant that Group A's didactic program also required two years, and adding a clinical practicum year extended the PDP training time to three years for this first group.

The first PDP participants completed the program in 1994. Since the project started in 1991, 13 psychologists have participated, and 10 have complete the training.

A December 1994 letter to Senator Inouye from Dr. Joseph , ASD(HA) addressed a number of concerns regarding the PDP. The Vector Research, Inc. (VRI), was selected to complete an outside evaluation to examine the cost-effectiveness and feasibility of the PDP. The VRI report, dated 17 May 1996, found the cost-effectiveness justified provided the prescribing psychologists were used as prescribing psychologists at least 51% percent of the time. The VRI study found that if prescribing psychologists are used more than 80% of their time after entering PDP training, they are less expensive than a combination of psychiatrist and psychologist that would be needed to provide the same mental health care. However, the VRI study also concluded that as the length of training increased, the cost-effectiveness benefit was less. The VRI study also found that PDP graduates were deemed most feasible for use at mid-size MEDDACs.

The National Defense Authorization Act FY 1996 (P.L. 104-106, Feb 10, 1996) directed that the DoD Psychopharmacology Demonstration Project (PDP) terminate by 30 June 1997. It also required the Comptroller General (GAO) to evaluate the PDP with a report due NLT 1 April 1997.

The GAO report to Congress, released 1 April 1997, concluded that while DoD met the mandate to train psychologists to prescribe drugs, and that psychologists demonstrated they can provide this service within the Military Health Services System (MHSS), there was no reason to reinstate the PDP demonstration project. GAO reached its conclusion by noting that DoD did not take into account prescribing psychologists when it determined its readiness needs. Relatedly, GAO concluded that the military has more psychiatrists than are needed to meet its current and near future readiness requirements. It also expressed concern about "guarantees that DoD will reduce its readiness requirement for psychiatrists in response to shifting a portion of a psychiatrist's function to a prescribing psychologist."

The PDP has been continually evaluated by the American College of Neuropsychopharmacology (ACNP). Shortly after the creation of the PDP, the ACNP successfully competed for a DoD contract to serve as an external, independent, and unbiased evaluator of the PDP in all respects. The ACNP then constituted the ACNP Evaluation Panel as its chief mechanism for performing the contractual tasks and conditions. The Panel comprised three board-certified psychiatrists and three licensed clinical psychologists (different individuals served at different times). Their work was directed and coordinated by the Executive Secretary of the ACNP (a licensed clinical psychologist). All members of the Panel had research and clinical experience, and all had served as directors of training programs. (Appendix I provides data about Panel members.) The ACNP Evaluation Panel followed a written general management plan (Appendix II).

The ACNP itself is a multidisciplinary group of about 600 applied and basic researchers who have passed rigorous membership requirements. Neurochemistry, neurobiology, neurology, pharmacology, adult and child psychiatry, clinical and experimental psychology, and cognitive science are among the disciplines represented. In 1989, predating the PDP, the ACNP Council appointed and charged a task force with reviewing the issues and presenting recommendations on whether and under what military circumstances nonphysician professionals, such as clinical psychologists, might appropriately prescribe psychotropic medications. Subsequently, the ACNP endorsed and published a consensus statement, *Prescribing Privileges for Non-Physicians in the Military* (Neuropsychopharmacology, 1991,4, 290-291), that outlined its position on the minimum prerequisites and training required and the appropriate circumstances for such practice (Appendix III).

Confidentiality note: A 2-letter code (e.g., AB) is used in this report to refer to individual PDP graduates. The first letter designates the individual within the group, and it is the same code used in the earlier reports of the Panel. The second code letter designates a specific training group or class, i.e., Group A, B, C, or D. Thus, "AB" refers to Fellow A in Group B, "BA" to Fellow B in Group A, "AD" to Fellow A in Group D etc. In addition, masculine pronouns are used throughout to refer to individual prescribing psychologists, although three of them are women.

Although the PDP training has been terminated, the ASD(HA) directed the ongoing evaluation and external monitoring of the prescribing psychologists for FY 1998. Therefore, LTC Thomas J. Williams, Project Director, established the following evaluation goals, as a minimum, for the ACNP to address in their external monitoring and ongoing evaluation of the 10 DoD prescribing psychologists:

(1) Determine the overall effectiveness of the PDP Program as revealed by practice patterns, scope of practice, benefit, and workload of PDP fellows as judged by the Military Treatment Facility (MTF) Commanders (or their designated Directors of the Medical Staff), proctors or supervisors of PDP fellows, the PDP fellows and their patients.

(2) Assess and report on the value-added component that prescription privilege offers a psychologist in the provision of patient care in the MHS.

(3) Assess the perceptions of psychiatrists and primary care providers of PDP fellows scope of practice and practice guidelines as it relates to quality care delivery within the MHS.

(4) Evaluate utilization of graduates as it relates to the vision and scope of practice of the PDP.

PDP Training Program: Class Size, Chronology, and Service Membership

Table 1 shows the class size, chronology, and service membership of the four groups recruited into the PDP. Training began in August 1991 with Group A comprised of four clinical psychologists, two from the Army and two from the Navy. The subsequent Groups B, C, and D were educated in a 2-year program. Two fellows were recruited in 1994 to Group B, five fellows in 1995 to Group C, and two fellows in 1996 to Group D. Of the total of 13 fellows accepted, 10 graduated. Two members of Group C were recruited into the Army from civilian life, and then into the PDP (a practice that subsequently was prohibited). All fellows held a doctorate in

clinical psychology and were licensed to practice clinical psychology in some state. Their postdoctoral clinical experience ranged from a few to more than 10 years. They generally had minimal education in the traditional premedical courses. When the PDP ended in June 1997, all 10 graduates had been assigned to nine different medical centers throughout the United States where, in Spring 1998, they functioned as prescribing psychologists under varying degrees of supervision that usually related to duration of postgraduate practice.

Table 1. The Four PDP Training Groups: Class Size, Service Representation, and Training Program Chronology

	Group A	Group B	Group C	Group D	Total
Class Size					
Began (N)	4	2	5	2	13
Completed (N)	2*	1**	4***	3***	10
Service (Completers)					
Army	0	0	1	2	3
Navy	2	0	1	1	4
Air Force	0	1	2	0	3
Chronology					
Didactic Training	1991-93	1993-94	1994-95	1995-96	
Clinical Practicum	1993-94	1994-95	1995-96	1996-97	
Graduation	1994	1995	1996	1997	
Postgraduate Practice	1994-	1995-	1996-	1997-	

*1 transferred to USUHS Medical School, and 1 resigned from the service
**1 resigned from the service
***1 member of Gp C repeated the practicum year and graduated in Gp D

PDP Staff and Military Command

LTC Gregory Laskow, Chief of Psychology, WRAMC, and Chief of Psychology, US Army, was the first Project Director of the PDP, serving in that role until June 1994. Dr. Laskow was an energetic, able and articulate individual who demonstrated excellent skills in maintaining cordial and productive relationships among the many parties involved at USUHS, WRAMC, and ASDHA. Dr. Laskow was succeeded as Project Director by Dr. Fred Tamayo (1994-1995), Dr. Lawrence Klusman (1995-1997), and Dr. Tom Williams (1997-1998). Dr. Dennis Grill, Psychology Consultant to the Surgeon General of the Army was very helpful on many matters and, particularly, in effecting the establishment and convening the meetings of an Advisory Council to the PDP. The accomplishments of that group in formulating

recommendations and guidelines for scope of practice, privileges, formulary, and other standards were essential prerequisites to the post-graduate practice of the fellows.

The chain of command of the PDP involved the WRAMC Command, the Army's OTSG, and the ASDHA. Individuals in all these units provided much support and made numerous contributions throughout the history of the PDP operation. The ACNP Panel met with all of the named individuals on each site visit to Washington, DC, as well as with various individuals representing the WRAMC Command, the Army OTSG, and the ASDHA.

PDP Training Director

A few months into the first year of the program, a psychiatrist on the WRAMC staff, LTC (later COL) Marvin Oleshansky, began meeting voluntarily with the fellows to teach and supervise their activities. Subsequently, he was appointed half-time to the crucial new position of Clinical Training Director of the PDP. The appointment became full-time by early 1993. Dr. Oleshansky remained a central force until the last class graduated in June 1997.

The Training Director played a pivotal role in overseeing the day-to-day activities associated with the demonstration project. He also provided the Project Director with guidance and recommendations as to the training components and minor adjustments to the training program. He also served as the liaison for curriculum and didactic issues with the various Steering Committees of the project at Uniformed Services University of the Health Sciences and WRAMC. He also insured that the current body of scientific and applied literature in psychopharmacology was adequately represented within the training components of the project.

The Didactic Curriculum

The 2-year medical school didactic program for Group A was very demanding (Table 2). Didactic instruction totaled about 1400 hours over the 2-year period, and the fellows attended additional brief seminar series. The policy established was that the fellows were to be graded in comparison with medical student standards.

Table 2. Didactic Curriculum for the PDP Groups

	Group A		Groups B, C, D	
Year 1	Course	(hours)	Course	(hours)
Medical School	Gross Anatomy		Pharmacology	(102)
	Neuroanatomy		Clinical Pharmacology	(21)
	Histology	(341)	Clinical Medicine II	(121)
	Biochemistry	(160)	Clinical Concepts	(100)
	Physiology	(172)		
	Clinical Medicine I	(86)		
Modified Med Sch			Anatomy/Cell Biology	(48)
			Neuroscience I,II	(91)
			Biochemistry	(57)
			Physiology	(39)
GSN			Pathophysiology	(60)
			Health Assessment	(39)
Seminars	Clin Psychopharm	(34)	Clin Psychopharm	(34)
Year 2				
Medical School	Pathology	(212)		
	Pharmacology	(133)		
	Clinical Medicine II	(180)		
	Clinical Concepts	(100)		
Seminar Series	Behavioral Pharmacology			
	Human Genetics			
	Immunology			
TOTAL HOURS	1418		712	

Observation, consideration, and evaluation of Group A's performance and the necessity to confine the didactic curriculum to one year led to a number of changes for subsequent groups. For example, the level of detail in Anatomy, Histology, Microscopic Pathology, Biochemistry, and Endocrinology to which Group A was exposed did not appear appropriate to the proposed role of prescribing psychologists. Such considerations led to a number of decisions that resulted

in shortening and tailoring these and other courses (or components of courses) to the specific needs of potential prescribing psychologists.

The result was that the fellows in Groups B, C, and D experienced a very different academic program at USUHS. They took a combination of four standard USUHS Medical School core courses, five modified and abbreviated Medical School courses taught by Medical School faculty, and two Graduate School of Nursing (GSN) courses (Table 2). One of the GSN courses, Health Assessment, included interviewing, history taking, and physical examination. The total didactic instruction for the final class was approximately 700 hours, and curriculum differences from Group B-to-C-to-D were relatively minor.

As the 2-year program progressed, the fellows in Group A generally became more proficient and attained better grades. On average, the fellows in Groups B, C, And D obtained better grades in the tailored medical school courses and the GSN courses than in the medical school core courses. Nonetheless, they did relatively well across courses, and a number of fellows attained superior grades in core medical school courses. The Evaluation Panel believes this was due to many factors, including the generally greater maturity of the fellows compared to the medical students.

The Clinical Practicum Program

Group A's practicum was linked closely with the PGY-II psychiatry residency program at WRAMC. The PDP fellows had full-time assignments to the inpatient psychiatric service for approximately nine months. During the three months between the end of the didactic training and the beginning of their inpatient service, they took on-call duty for the Psychiatry Admission Service, spent one month on Psychiatry's Consultation/Liaison Service, and reviewed charts of psychopharmacologically treated patients from a chronic care outpatient clinic. Group A did not have an outpatient rotation.

Ward psychiatrists, civilian attendings, and the PDP Training Director (all psychiatrists) supervised the fellows. For medical and legal reasons, the fellows had to have medication orders, laboratory and radiology requests, restraint orders, and admission and discharge summaries co-signed by the supervising psychiatrists. They could sign orders concerning patient ward status, including suicide precautions, and they could order some consultations independently. New cases were assigned on a rotating basis between fellows and residents. Each had similar responsibilities for working-up and treating patients, and they had comparable supervision.

The two Group A fellows who completed the program treated a total of 223 inpatients during the 9-month experience. The treated group included about 50% men and 50% active duty personnel. Median age was 37-38. Diagnoses of those treated included 32% substance abuse, 21% non-bipolar major depression, 13% generalized anxiety, panic, obsessive-compulsive, and post traumatic stress disorders, 9% adjustment disorders, 6% schizophrenia spectrum, 6% dysthymia, 4% anorexia/bulimia, 3% bipolar disorder, and 2% somatiform disorder. The two fellows prescribed a total of 41 different psychotropic medications, including representatives of

most drug classes except the monoamine oxidase inhibitors (MAOIs). Both fellows were conservative, favoring safer and newer medications such as the selective serotonin reuptake inhibitors (SSRIs).

Beginning with Group B, the practicum differed in a major way from Group A. The inpatient rotation was reduced to six months to allow a 6-month outpatient assignment that, for Group B, was divided between the psychiatry clinic and the consultation/liaison service. For Group C, three of five fellows were assigned to WRAMC where they had 6-month rotations on inpatient and outpatient services. The outpatient time was divided between the psychiatry and the psychology clinics; the consultation/liaison assignment had proved nonproductive, and it was dropped. The two other Group C fellows had their clinical practicum at Site #9, where they had inpatient and outpatient rotations similar to those at WRAMC. The fellows at Site #9 took emergency room call regularly, a training experience that all concerned considered invaluable. All five Group C fellows were together at WRAMC about half a day weekly where they attended a seminar in biological psychiatry and a case conference. Group D's practicum was at WRAMC and was essentially like that of Group C.

The combined inpatient and outpatient case load for two Group D fellows (excluding one fellow who entered training with Group C but graduated with Group D) included 319 patients—57% women, 45% active duty, and almost 75% were less than age 50. Nearly 50% were diagnosed as non-bipolar depressive spectrum disorders, 8% bipolars, 18% substance abuse, 13% anxiety or panic, and 13% adjustment disorders. One fellow prescribed 40 different psychotropic agents, the other 29. One or both fellows treated 20 or more patients with clonidine, fluoxetine, sertraline, and trazadone; one or both treated 10-19 patients with clonazepam, lithium, lorazepam, olanzapine, and risperidol; and one or both treated 5-9 patients with bupropion, carbamazepine, levothyroxine, valproic acid, and venlafaxine. For the most part, they had more experience with newer, more commonly used antidepressants (especially SSRIs), antipsychotics, and mood stabilizers, and less experience with tricyclic antidepressants and MAOIs.

Overall, the transition of the PDP Fellows into the practicum rotations proceeded smoothly. An early concern of many that psychiatric faculty and residents would resent the fellows and resist the program proved largely unjustified. On the contrary, the psychiatry residents and most of the faculty and the nursing staff were generally accepting and positively supportive. For the most part, the fellows in all groups were highly regarded and well liked. The prescribing psychologists shared their experiences in psychometrics and the psychological, behavioral, and cognitive therapies with residents and other trainees, such as medical students, who in turn shared their medical expertise with the fellows. Operationally, the fellows performed physical examinations under the direction of the ward psychiatrists or the PDP Training Director.

The most common concern cited by most of the psychiatrist supervisors in one form or another was that the fellows knew too little medicine to prescribe psychotropic drugs safely. They worried about the lack of medical sophistication. These concerns applied more strongly to two graduates but were ascribed to a lesser extent to all fellows at the point of graduation.

Nevertheless, most of the psychiatrist supervisors also said that the fellows knew very well when they were medically over their heads and when they needed consultation.

Postgraduate Assignments

The 10 fellows who graduated from the PDP were assigned to nine different AF, Army, or Navy posts throughout the country for supervised postgraduate practice. Seven fellows at seven sites were visited and reviewed by the ACNP Evaluation Panel in Spring 1997, prior to the termination of the PDP, and all 10 were visited and reviewed in Spring 1998 in what may have been the final round of visits by the ACNP Evaluation Panel. Although the PDP has terminated, the graduates have continued to prescribe at their respective stations. As a group they have prescribed for many active duty personnel, dependents, and retirees. Individually, their practices have ranged from 100% to 10% active duty, from 80% to 0% dependents, and from 75% to 0% retirees. Psychiatrists proctored all the graduates during the initial post-graduate period. For the most part, the graduate and supervisor/proctor relationships were close and compatible. The spectrum of supervision varied from site-to-site from occasional case discussion and review of 10% of the graduate's pharmacotherapy case records to review and discussion of every case. Five graduates had attained independent provider status at the time of the 1998 site visits.

An important event in the history of the PDP occurred in 1995 when the DoD's Tri-Services Advisory Council to the PDP provided a set of non-binding recommendations for those concerned with appraising credentials, granting privileges, and setting formularies for the PDP graduates. These guidelines outlined a scope of practice for prescribing psychologists, spelled-out an initial suggested formulary, and otherwise provided an orienting framework for the authorities and committees at the various assignment stations. It was expected that the guidelines would be flexible and adjustable to allow for individual differences among graduates and the different needs of assignment stations. The suggested scope of practice was that prescribing psychologists be privileged to perform independently all the activities that a clinical psychologist normally performs and also be granted additional privileges. In collaboration with a physician proctor, prescribing psychologists could select and assess patients for pharmacotherapy, identify and manage adverse reactions and medication interactions, and evaluate treatment results. The recommendations suggested that the PDP graduate under indirect supervision, i.e., retrospective chart review, could do physical assessments of patients prior to initiating pharmacotherapy, monitor and manage the medication treatment of chronic patients with stable psychiatric conditions, and adjust medications and dosages in accordance with treatment plans. Direct supervision, i.e., seeing or discussing cases with a physician, was required to initiate or discontinue any medication in the prescribing psychologist's formulary. The graduates were not to treat patients with concomitant, unstable medical conditions or patients outside the 18-65 age range. The formulary recommended by the Advisory Council included a wide range of antipsychotic, antidepressant, antimanic, mood stabilizing, antianxiety, and adjunctive agents such as propranolol and benztropine. Carbamazepine and MAOIs were not in the suggested formulary.

Except for the next section which describes the ACNP Evaluation Panel's means and methods of participation in the history of the PDP, the remainder of this report is focused

primarily on the performance of the graduates in their 1998 roles, and, especially, on the specific putative influences of characteristics and variables of the training program on its "outcomes" or "products".

The ACNP Role

ACNP Evaluation Panel Visits: Each year from 1992 to 1998 the ACNP Evaluation Panel made site visits to observe, review, evaluate, and make specific recommendations about the progress of the fellows and the training program. Generally, there were three visits yearly to each group, with a total of 10 to Group A, six each to Groups B and C, and three to Group D. (Group D was visited only during the practicum year.) In addition, each group had an examination visit yearly. Shortly after each site visit, the ACNP Evaluation Panel provided written reports of its observations and recommendations to the PDP Project Director who distributed copies within the DoD. Global summary progress reports and evaluations were provided at the end of each group's didactic training, and, a year later, at graduation. Moreover, the Evaluation Panel visited the postgraduates of Group A in 1995, 1996, and 1997, Group B in 1996 and 1997, and Group C in 1997. All postgraduates were visited in the Spring of 1998.

Prototype visits to the preclinical program included: opening and closing executive sessions of the ACNP Evaluation Panel; opening and ending briefings with the PDP Project Director, PDP Training Director, and Army Psychology Consultant; individual and group meetings with USUHS faculty (and, sometimes, the Deans or President of USUHS); a group session with all fellows and individual interviews with each, and meetings at the Pentagon with administrators in the ASDHA responsible for the PDP. Prototype visits to the clinical practicum sites were similar. There were opening and closing executive sessions, opening and closing briefings with PDP staff, a review of individual patient charts and caseload statistics, a group meeting with all fellows, an individual interview with each fellow that usually included a case presentation, interviews with the primary psychiatrist supervisor and other clinical and administrative supervisors, and meetings with the medical center director and administrators at ASDHA and Army OTSG.

Prototype visits in 1995-1997 to supervised postgraduate practice sites included opening and closing executive sessions, opening and closing briefings with local service chiefs, review of a randomly selected set of medical charts of the graduate's patients, examination of caseload statistics, interviews with graduates including case presentations, and interviews with principal clinical supervisors. The ACNP Evaluation Panel's methodology for the 1998 visits differed somewhat and is described subsequently.

Examinations: The ACNP Evaluation Panel administered examinations at the end of each fellowship year. At the end of the didactic year, fellows took a lengthy (175-200 items), objectively scored, multiple choice test of knowledge of psychopharmacology. It was considered a baseline for comparison with a similar test included as Part I of a 3-part final examination at the end of the practicum year. The before and after versions of the multiple choice test, in fact, included subsets of identical items. Part II was an essay examination that differed among groups.

Part III was an oral examination that differed also among groups. For Groups A and B, fellows were provided with written case descriptions that provided minimal data; their task was to do a consultation or a case presentation, with the ACNP Evaluation Panel acting either as the patient or as a repository of information about the patient. The orals for Groups C and D were each based on three 20-minute videotaped psychiatric interview segments. After viewing each segment, the fellow had 20 minutes to organize a case presentation, and then 25 minutes to present and be questioned by the Panel.

Members of the Panel and other psychiatrists who took the multiple-choice examinations considered them difficult, and a score of 60% was established as the passing level. The orals were modeled on psychiatry specialty boards and mock boards. The fellows generally did well on the objective and essay components, and they were judged to have performed as well as psychiatry residents and post-residents on the oral examinations.

Methodology of the 1998 ACNP Evaluation

In March and April 1998, the ACNP Evaluation Panel made another round of visits to each graduate's military assignment site. The 10 graduates were located at a total of nine military stations, as follows:

Date of Visit	Graduate Code	Military Station
2 March 98	CC & BD	Site #1
3 March 98	DC	Site #2
4 March 98	AC	Site #3
12 March 98	BC	Site #4
13 March 98	BA	Site #5
20 April 98	AD	Site #6
22 April 98	CD	Site #7
23 April 98	AA	Site #8
24 April 98	AB	Site #9

Description of Military Station Sites Visited by the ACNP Evaluation Team

SITE #1	Large Military Hospital in Southwest
SITE #2	Large Military Hospital in Southeast
SITE #3	Large Military Hospital in Southeast
SITE #4	Large Military Hospital in the Northwest
SITE #5	Large Military Hospital on the West Coast
SITE #6	Large Military Hospital in Southeast
SITE #7	Large Military Medical Center on the East Coast
SITE #8	Large Military Medical Center on the East Coast
SITE #9	Medium-Large Medical Center on the East Coast

Prototype visits in 1998 included opening and closing executive sessions, review of 14 charts from cases seen the past three months, 60-90 minute interview (including closing briefing) with the graduate, and about 2-3 hours of interviews with clinical and administrative supervisors. The supervisors included the primary clinical monitor, the heads of the psychiatry and psychology, and the chief of the medical staff (or designate), and/or the medical center commander. Appendix IV includes the schedule followed at each station. Prior to the visit each graduate was asked to assemble for the Evaluation Panel a set of documents relevant to his current practice. The most important of these were: (a) privileges statement, (b) scope of practice, (c) formulary, (d) case statistics for the period 7-1-97 to 1-31-98, and (e) the most recent written evaluations of the graduate.

As an aid in the chart review, the ACNP Evaluation Panel constructed a Medical Records Checklist (Appendix V). The form was a composite of ideas and items modified from similar checklists in use on the psychiatry services of several panelists. The Panel also developed a set of four semi-structured interview guides: (a) Semi-structured Guide for Interviews with PDP Graduates; (b) Guide for Interviews with Clinical Supervisors; (c) Guide for Interviews with Service Chiefs or Administrative Supervisors; and (d) Guide for Interviews with Station Commanders or Medical Facility Directors. The guide for interviewing graduates, for example, included sets of questions about seven major areas: (a) typical weekly practice, (b) issues of scope of practice, privileges, and formulary, (c) major duties, responsibilities, and goals at the station, (d) impact of prescription privileges on practice, (e) supervision, (f) patient satisfaction and outcome, and (g) continuing education. Each graduate also was asked to complete a self-report write-in version of the same guide used to interview them. Copies of the semi-structured interview guides are in Appendix VI.

1998 Practice Profiles of the 10 Graduates

Air Force

Three of the 10 PDP Graduates were AF Officers who held the rank of Captain or higher. One individual was trained as a member of Group B and is coded as Graduate AB. The other two were trained with Group C and are coded as Graduates AC and DC.

Graduate AB

Assignment: This graduate was the only member of the class that completed the PDP in June 1995. He was then assigned to Site #9 where he was Assistant Chief of the Mental Health Clinic. At the time of the site visit he continued in a proctorship relationship with a psychiatrist, Dr. Lacy, Chief of the Mental Health Clinic. The clinic was a fairly large and busy unit that was physically separate but closely linked with the hospital and ER. In addition to Dr. Lacy and the graduate, the staff included a child psychiatrist, two other psychologists, two mental health nurse practitioners, and three psychology interns. The only Site #9 inpatient unit was for substance abuse, but the graduate could admit to WRAMC.

The graduate saw about 38 patients weekly. These included two new patients, 22 in continuing individual pharmacotherapy and 16 in groups. When seen, he had 47 active medication cases. Their average age was 36.5 years, range 20-61. Sixty-four percent were active duty airmen and 23% their dependents; the others were retirees (9%) or their dependents (4%). Primary diagnoses were: 62% depression or mood disorder, 19% anxiety disorder, and 17% adjustment disorder. Only seven of the group had a concomitant Axis III disorder. Data presented for 67 cases treated with medication from April 1997 to April 1998 indicated that he prescribed a total of 18 different agents. He prescribed four medications to eight or more cases each: fluoxetine (36), sertraline (12), bupropion (9), and clonazepam (8). He prescribed six drugs for 2-4 patients each: buspirone, lorazepam, nefazodone, paroxetine, trazodone, and venlafaxine. Eight drugs were prescribed for one patient each: amitryptline, clomipramine, naltrexone, nortryptline, olanzapine, resperidone, yohimbine, and zolpidem.

Most clinic patients were self-referrals or came by way of the family practice clinic. Many cases were treated first by other psychologists with psychotherapy and, if that did not work, were referred to the graduate for medication. On Monday, in a typical week, he evaluated two new cases, covered ER, and monitored the walk-in clinic intakes of two psychology interns. Tuesday, he saw continuing treatment cases, ran a group utilizing cognitive behavior therapy for anxiety and stress, and supervised psychology interns in group therapy. Wednesday, a short day, he ran another anxiety and stress group and did administrative work until mid-day. Thursday, he had follow-up appointments, did some brief medication checks, and spent an hour supervising. Friday, he supervised interns, attended a Psychology Department staff meeting, and had more follow up appointments. He estimated that he spent 25hrs weekly seeing individual pharmacotherapy cases.

Interview: Graduate AB noted that he considered Site #9 to be a good assignment and was happy to be there. He particularly liked the integration with psychiatry. He said he discussed starting and stopping antipsychotics—which he did with only two patients in the past year—with Dr. Lacy, and he had the typical 10% of medication charts review. Otherwise, supervision was largely informal and amounted to speaking with Dr. Lacy regarding a patient or two for a total of about five minutes weekly. He did not do physicals; nor did anyone else in the clinic. He ordered lab tests whenever the medical people had not done so, and he voiced again the opinion that more emphasis on the selection and interpretation of laboratory tests should have been part of the PDP training. His formulary still did not include MAOIs, carbamazepine, or stimulants. He regarded that as a bit frustrating, but less a problem than the fact that a formulary change was required every time he wanted to add a new agent.

He said that prescription privileges had enhanced his value to the health system. For example, he provided treatment to patients who could not afford CHAMPUS. His integration of pharmacotherapy with cognitive behavior therapy helped him to mobilize self-help and self-change. He had noted no change in his use of psychological tests and measures compared with before the PDP, and he reckoned he used psychometrics much like his colleagues. Nor had he altered his theoretical views on the etiology of mental disorders. He said that his knowledge of the mechanisms and details of the biological bases of behavior had greatly increased, but he

would not have joined the PDP if it were not already consistent with his biopsychosocial orientation. He contended that the main differences between his present and former practices were his more comprehensive perspective on the physical problems of psychiatric patients and his ability to order lab tests.

His next assignment was scheduled to begin July 1998 at a large AFB in the Southwest. He would be the prescribing psychologist in a general practice clinic that had no psychiatrist on staff but was literally next door to a major medical center. .

Charts: Several members of the Panel were of the opinion that the charts examined were sparse, not well detailed, and short on narration but met clinic standards. The notes, however, were augmented in most charts by self-evaluation measures, such as the Beck Depression Scale, that were administered systematically and repeatedly. Also laboratory data were on line for computer access, and, in fact, he had discovered that a referral had proteinurea when reviewing lab data. There was good awareness of the nature, management, and treatment of the side effects of antidepressants. He prescribed appropriate drug types. Some Panel members believed he should have provided more logic for electing one drug versus another.

Continuing education: Graduate AB noted that he attended a one week psychopharmacology conference each year, usually Gelenberg's program in Tucson, AZ. At Site #9, he arranged drug company sponsored lunch time presentations and telephone conferences, and national consultants occasionally presented all-day seminars. The graduate gave 3-hour block presentations on psychopharmacology to psychology interns. He had read several relevant books since July 1997, regularly read psychopharmacology journals, and often logged-on to internet sites that focused on psychopharmacology.

Chief of Medical Staff: Dr. Viscarrondo, a pediatric cardiologist, had learned recently about the PDP program and that a prescribing psychologist was on the base. He met with the graduate in anticipation of the site visit, and said he was comfortable with the privileges and formulary. Dr. Viscarrondo said there had been no incidents and that all was going well to his knowledge. The Evaluation Panel initiated discussion of the fact that the proctorship had continued for nearly three years, and the Panel suggested that it would not be unsuitable for the proctorship to end before the impending reassignment. Dr. Viscarrondo said he thought there would be no problem if a recommendation came through channels.

Clinical supervisor: In addition to Dr. Lacy, the proctor, Dr. Hall, Chief of the Mental Health Flight, and Dr. Moe, Chief Psychologist, were present. The meeting took place the day after the preceding interviews. A major transition was imminent in the outpatient unit as Drs. Lacy and Hall, as well as the graduate, were transferring. The Evaluation Panel briefed them on the current round of site visits—noting that the graduates were filling different niches and that there had been no adverse events—and suggested that if they thought highly of Graduate AB an advance to independent provider status would be timely.

Dr. Lacy appeared more comfortable about supporting independent provider status than did Dr. Hall, but he indicated it was her decision. Dr. Lacy said the graduate met his main criterion for such status because he knew what he did not know and was safe, i.e., the same criterion he applied to himself. The proctorship had become increasingly less restrictive, he said. For instance, strict interpretation of the guidelines would have the graduate speaking with the proctor every time he started or changed medication, but, for some time, he has done this with uncomplicated cases without prior discussion. Dr. Lacy indicated he was pleased when Graduate AB referred him an occasional patient with medical problems because it indicated awareness of limitations. He said that the graduate did not lack humility and that his willingness to seek help was fostered by their mutually collegial relationship. He and the graduate no longer set a time for proctoring. They spent much time together in their normal duties, and Dr. Lacy kept his office door open. He said his confidence in the graduate had led him to expand his formulary, e.g., he could prescribe yohimbine with fluoxetine for sexual problems. Dr. Lacy said he was comfortable when the graduate covered for him during his leave or vacation. Within the past week, for instance, Drs. Lacy, Hall, and Moe were all away, the graduate ran the clinic, and all went well.

Speaking about the PDP, Dr. Lacy said he believed the training was adequate, and he could not suggest changes. He reported that he supervised mental health nurse practitioners and considered them so much less well trained that he would not consider having them cover for him. Dr. Lacy suggested that any future PDP type programs ought to collect patient outcome data (distress scales, hospitalization rates, suicide incidents, improvement rates, etc.) that would enable systematic comparisons of prescribing psychologists with relevant contrast groups.

Dr. Hall made it clear that she would not recommend the graduate for independent provider status. She said her concerns were not about him but were due to the absence of civilian precedents. She voiced the view that prescribing psychologists were specially created political animals, that there were no comparable civilian positions, and, therefore, there were no guidelines. She contrasted the prescribing psychologists with nurse clinicians who were licensed in some states and who had guidelines for credentials and scope of practice. Dr. Hall did say that from her perspective—which was more distant than a proctor's—the three PDP Fellows she had known were quite well-trained. Dr. Lacy added that the quality of the program and its graduates ought to make it harder for the short-cut, diploma mill versions proposed in some quarters. Dr. Moe said his view was that the DoD had been told to do a demonstration project, they had done it, and the next step was up to the states.

Summary: Graduate AB practiced collaboratively and harmoniously with psychiatrists in an outpatient clinic. The vast majority of his patients were medically healthy active duty airmen or their dependents who presented with distress from depression, anxiety, and adjustment disorders. Pharmacotherapy with SSRIs or antianxiety agents was part of the treatment of nearly all his patients. Usually, he judiciously combined cognitive, behavioral, or group therapy methods with his medications. Supervising, training, and educating staff were also significant duties. As have other graduates, Graduate AB complained mildly that a formulary comprised of specific drugs, as opposed to classes or categories, was difficult to live

with. The tediousness of repeatedly reactivating the bureaucracy whenever a promising new agent became available was burdensome.

Overall, in his daily work, the graduate's practice appeared de facto independent. Yet, on paper, he continued to be held on a tight leash for a third year. The reasoning heard from a key supervisor who used the *absence of civilian precedents* as the basis for refusing to recommend independent provider status *within the military* was unconvincing to the Evaluation Panel.

Graduate AC

Assignment: This prescribing psychologist completed the PDP in June 1996 and since then has been stationed at Site #3. In August 1997 he became Chief of the Mental Health Clinic, a unit that treated 500-600 patients monthly. He was the administrative supervisor of two psychologists, two psychiatrists, two social workers, and six technicians. He typically spent 25% of his time on administration and 75% on patient care. Each week he saw 4-5 new patients for intake evaluation, 15 continuing cases for individual treatment, and 15-20 in group treatment. He also was responsible for 5-10 security clearances. His caseload distribution was approximately 30% active duty, 35% dependents, and 35% retirees; excluded were children, the elderly, and persons with unstable medical conditions.

After a year of closely proctored postgraduate practice, his supervising psychiatrist recommended Graduate AC for independent provider status. As such, he had the standard 10 % of medication charts review per month. His outpatient notes were not countersigned. He spent about an hour weekly in informal consultation with psychiatrists and other physicians about difficult cases. As he was one of three professionals in the clinic with prescribing authority, he got many direct pharmacotherapy referrals. The MAOIs were the only significant exclusion from his formulary.

In a typical week, he did intake evaluations, follow-up treatment sessions, and administration on Monday and Tuesday. Intakes were rotated among the graduate and the two psychiatrists. He scheduled psychological testing for part of Wednesday but was more apt to supervise and review the psychometrics of his psychology staff. He also performed and wrote-up medical boards, but these required physician signatures. He was on-call for ER on Thursday where he could expect about five calls. On Friday, the graduate did more intakes, follow-up treatment, and administration. Graduate AC was on call every 7th weekend for the 20-bed inpatient service. He had admitting privileges that he used for not only weekend cases but for ER cases. He did the histories, physicals, and work-ups for his weekend admissions, made rounds on all the acute patients, and put status notes in their charts. His inpatient orders were reviewed and countersigned on Mondays

Interview: Graduate AC reported that he was happy and content with his present assignment where he made productive use of his psycopharmacology training. He said the PDP had provided him with exactly what he expected and wanted. His opinion was that while

retaining his identity as a psychologist, the PDP training had fostered his progress toward the biopsychosocial-spiritual model of treatment that had been his career goal. (He had a master's degree in theology.) He said that he could now deliver a seamless, as opposed to disjointed, range of mental health services. He said he felt respected locally by not only his mental health group but also by the hospital staff. He was consulted by primary care and other specialists. For example, last week a surgeon called him, and two nurse practitioners and a nurse anesthetist consulted him about their cases. He taught physician assistants, and he supervised a weekly case conference of the family practice residents on rotation in the clinic. He said that he was now comfortable evaluating laboratory test results. Noting that medical problems were relatively common in his practice, he gave an example of a case of haloperidol-induced prolactinemia with reduced libido that he managed by dose reduction.

He said that his current privileges, scope of practice, and formulary provided him ample opportunities to use his prescribing skills. They imposed no unreasonable limitations, but he said he wanted some over-the-counter medications added to his formulary because the inpatients often need analgesics, laxatives, etc..

Charts: The Evaluation Panel reviewed 14 charts of medicated patients. His clinical descriptions supported his diagnostic formulations, treatment plans, and choice of drugs. His follow-up notes were very complete, detailing all the symptoms he followed. His patients tended to be in carefully managed combination pharmacotherapy and psychosocial treatment. He periodically applied psychological measures, such as the Beck Depression Inventory, to assess the course of therapy. He consistently included a statement that informed patients of his prescribing psychologist status and a report of the patient's assent to treatment. Instances of sophisticated interventions, such as augmentation of fluoxetine with buspirone, were noted. Later, the Chief of Medical Staff said she was familiar with the graduate's charts and considered them superb, and she added that the recent JCAHO review of his records was also very positive.

Continuing education: As a training center for family practice residents and physician assistants, Site #3 offered weekly case conference that provided Level 2 CE credits. Drug company representatives offered in-service training for CE credits. Graduate AC declined Gelenberg's 1998 psychopharmacology review conference in Tucson, AZ, saying it offered little new. He expected to attend an alternate conference in Orlando, FL. He used e-mail to stay abreast of drug developments and to participate in a committee on training prescribing psychologists.

Clinical supervisors: The Evaluation Panel met with LTC Gingrich, the psychiatrist proctor, LTC Rachman, Chief of Psychology, MAJ Stea, an outpatient psychiatrist, and MAJ Connor, Chief of Inpatient Psychiatry. These four professionals clearly and strongly appreciated Graduate AC, and they said his overall performance was superb. Dr. Gingrich emphasized the importance of Graduate AC's role in light of the local shortage of psychiatrists and, indeed, they treated him much like a psychiatrist. MAJ Condor indicated that he opposed the PDP both in principle and as a psychiatrist, but he said he greatly admired Graduate AC and had great

confidence in his ability to care prudently for his patients with medications. The ability of Graduate AC to share weekend call was a great help to the psychiatrist, but a psychiatrist back-up did remain in town whenever Graduate AC was on-call. MAJ Condor said he had supported Dr. Gingrich in encouraging the graduate to seek privileges as an independent provider.

Drs. Gingrich and Seta concurred that Graduate AC's practice is conservative, up-to-date, and consistent with their own approach. They said they saw no differences between his and their own diagnoses, work-ups, physical exams, and treatments of inpatients. They reported that he posed no management problems, and they emphasized there have been no negative incidents. They said they felt completely comfortable with his skills and found no need to check on him. They agreed that if he has a question, he does not hesitate to ask. One of the psychiatrists suggested that prescribing psychologists might always be a bit weak in the medical aspects of patient care and, for that not to happen, they might need the 4-year exposure to patients that psychiatry residents had.

Medical center administration: COL Abernathy, Chief of Medical Staff, said that there have been no problems with Graduate AC. She volunteered that she considered him "unique" and "outstanding." She said she had been skeptical initially about prescribing psychologists, as were many medical staff, especially the psychiatrists. However, the psychiatrists who worked with the graduate were the first to accept him enthusiastically, and this led to acceptance by the other physicians. COL Sheppard, Squadron Commander (and a nurse by profession) enthusiastically supported and expanded upon Dr. Abernathy's remarks.

Summary: This PDP Graduate had integrated smoothly and productively into not only the outpatient service but the inpatient service and the on-call schedule. He was treated almost like a psychiatrist by a very psychologically-minded psychiatry staff. While many of the medical and hospital staff may have regarded him as filling a psychiatry job slot, that was not the graduate's view. Instead, he reported that prescription authority had extended his role and value as a psychologist, added to the mental health skills and services he offered, and enhanced his ability to establish and maintain therapeutic alliances.

Graduate DC

Assignment: After graduating from the PDP in June1996, Graduate DC spent the next 15 months at Site #2 on the outpatient service. He completed his proctorship year and was credentialed as an independent provider. For the past six months he was on the inpatient service, an assignment he volunteered for in order to broaden and diversify his practice. The inpatient unit required intensive work over extended periods. MAJ Brown, the graduate's supervisor, was Chief of Inpatient Psychiatry. The inpatient unit was a busy 17-bed service as indicated by its 5-day average length of stay. Admissions usually came from the psychology clinic by day, the ER by night, and by transfer from medical floors. About 80% of the patients were young, active duty airmen, a few were dependents, and a few were retirees.

On a typical day, Graduate DC was in by 7:00am and out about 5pm. He first checked nurses' and referring providers' notes, then went to morning report where the staff audited a tape from the night shift, gave new orders, and reviewed patient appointments. At 8-9:00am, the ward team interviewed and discussed new admissions and patients hospitalized more than a week, usually 2-6 patients. At 9-10:00am daily, the graduate met with Dr. Brown. From then until noon he worked up new admissions, including complete histories, physicals, and treatment plans. He informed patients about his prescribing psychologist status while doing the physicals, and he called in Dr. Brown for questions about findings. From noon to 3:00pm he checked, wrote, and signed orders, dictated narrative discharge summaries, prepared and dictated medical boards (physician countersigned), returned telephone calls from commanders, and talked with providers about patients. For the rest of the day he talked with patients, met families, saw the commander, etc. A typical inpatient case was a young airman who came after basic training to Site #2 for continued training, was unhappy, homesick, wanted to leave the service, and spoke suicidal notions. Such patients usually needed rehabilitation and time to adjust, or else required separation from service. Graduate DC's team usually had about six patients assigned, but its load could vary from 2-10 patients.

Interview: He said that he enjoyed his assignment and felt fulfilled in the work. He was very pleased that he and Dr. Brown had such an unusually close collaboration. They followed Dr. Brown's view of "two doctors, one service." They alternated the responsibility for new admissions between their two teams, but both kept well informed about all patients so they could cover for each other. At their daily meeting, the graduate and Dr. Brown reviewed anyone on psychotropics. Dr. Brown countersigned admission and discharge orders and orders for medications not on the formulary. The graduate was pleased with his current physical examination technique which he described as very thorough. He had a "refresher course" by watching Dr. Brown do 10 physicals, and then doing 10 while Dr. Brown observed.

The packet of records the graduate provided the Panel included a listing of the diagnoses of the 85 inpatients assigned to him in the past six months and a list of 300 prescriptions he wrote for outpatients and inpatients between 3/1/97 and 2/28/98. By primary diagnosis, 34% of his inpatients were adjustment disorders, 27% major depressions, and 12% bipolar disorders. Twelve other primary diagnoses were represented by one or two cases each. He wrote prescriptions for 20 medicines, and 90% of the prescriptions were for five agents: sertraline (30%), bupropion (23%), fluoxetine (20%), trazodone (10%), and venlafaxine (7%). (Many patients had multiple prescriptions.)

Charts: The Evaluation Panel reviewed 14 of Graduate DC's charts and considered them excellent. History taking, physical examination, use of consultants, and discharge summaries were exceptional. Well-articulated thinking supported the diagnoses, medication plans, and treatment decisions. The Panel thought that Graduate DC functioned at a high professional level, and it was suggested that one of the charts could be a teaching model of how to do it right. .

Continuing education: Graduate DC was making a significant local impact as an educator. As part of his CE and to retain his identity as a psychologist, he contracted to teach a course, Introduction to Psychopharmacology, at a nearby university. He also offered the same course on base to a group of VA Psychology Interns who traveled to the base to attend. The graduate had not yet found a CE course that suited his needs for the current year. Time to attend was not the problem because the AF was generous with CE time off. He bought many books, and he earned some book-based CE credits from the American Psychological Association. He watched systematically for psychopharmacology books and journals, and generally stayed abreast of developments by learning for teaching.

Clinical supervisors: The Panel met with Dr. Brown, Dr. Wainer, Chief of Medicine, and Dr. Crowder, Chief of Psychiatry, as a group. Dr. Brown characterized Graduate DC as extremely enthusiastic and a great team player. He made the point that he and the graduate worked so well together that their merger as a team represented the creation of an added asset; i.e., their different skills potentiated their "team effect" and, thus, they provided better service than would two psychiatrists, or a psychiatrist and a non-prescribing psychologist. Dr. Brown said the graduate's immense curiosity and eagerness to learn, i.e., his scholar's attitude, were major factors in his success.

Asked about prescribing practices, Dr. Brown said there was no problem. The two had the same formulary with few restrictions. The graduate's pharmacotherapy was conservative with respect to side effects, well-focused on treatment goals, and creative in using old drugs for new purposes. He said his physical examinations were thorough and excellent. Asked about negatives, Dr. Brown said there were none. He reported that the graduate had a talent for triaging medical patients, and predicted he would be good at it under many conditions. Drs. Wainer and Crowder strongly supported Dr. Brown's positive views. Dr. Crowder added that Graduate DC had been very much missed in the outpatient clinic. Dr. Wainer, who also was Chair of the Pharmaceuticals and Therapeutics Committee said they did a thoughtful review in approving his formulary, and they had had no regrets because he used drugs well.

Psychology supervisor: Dr. Doreman, Chief of Psychology, said the graduate had worked out very well, and psychologists did not regard him as a junior psychiatrist. He was perceived instead as a psychologist with special, or extended, skills. He interacted nimbly and productively with psychologists, psychiatrists, other physicians, and other mental health professionals. Dr. Doreman concurred that the graduate was greatly missed when he left the outpatient clinic. His work there with groups, particularly in divorce recovery, was another example of his strong contributions. Lately, the graduate had voiced concern about slippage in his psychological testing skills and had asked Dr. Doreman for refresher supervision.

Medical center commander: General Locker said that Graduate DC had made important contributions that have repaid the investment in his training. The PDP represented a win-win situation, he said, for military medicine and for cost effective care. It, thus, illustrated the principle that more education of personnel always paid dividends. He said he would not support

the PDP as a backdoor to psychiatry. On the contrary, the prescribing psychologist issues had been handled at Site #2 by delineating a doable scope of practice in conjunction with a straightforward quality assurance mechanism. And, he said, for as long as prescribing psychologists practice within accepted limits, they will have his support because their special talents make them a distinct addition to the provider network. He warned, however, that they, as is true of physicians, would need continued oversight. Indeed, such oversight might happen more easily in the service. He went on to observe that since prescribing psychologists had been so well-received and useful in the AF, perhaps, the AF should formulate guidelines or set standards for the training and oversight that ought to characterize civilian prescribing psychologist programs. He, too, worried about the likelihood of inadequate, fly-by-night programs springing up and producing practitioners likely to be dangerous to themselves and others.

Summary: This graduate was generally regarded as highly energetic and extremely bright, competent, and committed. He had nimbly and successfully rotated between outpatient and inpatient settings. He had impressed his psychology and psychiatry colleagues on both services with his considerable clinical skills and psychopharmacological prowess. He had established extraordinarily good relationships with the other psychologists and the psychiatrists at Site #2 where there was a shortage of both professions. His clinical and administrative supervisors recognized his excellent technical work, and there had been absolutely no complaints of any kind about him. In addition, he had taken on the significant role of psychopharmacology educator and, from all reports, had developed a highly successful introductory level course of excellent quality.

Army

Three of the 10 PDP Graduates were Army Officers holding the rank of Captain or higher. One individual trained with Group C and is coded as Graduate CC. The other two graduated with Group D and are coded AD and BD.

Graduate CC

Assignment: Graduate CC completed the PDP in June 1996 and after six weeks of officer training reported to the Mental Health Service of an Infantry Division, at Site #1. He was credentialed as a prescribing psychologist in January 1997 after working a few months as a non-prescribing psychologist. He had completed his psychopharmacology proctorship and, effective March 1998, was privileged as an independent provider with admitting privileges to the 20-bed inpatient unit at Site #1 Community Hospital. His position was Chief, Mental Health Service (an outpatient unit). He had the rank of Major and was up for promotion.

The division clinic treated only active duty soldiers. The staff included the graduate, a psychiatrist, a social worker, and five technicians. Typical cases were young, physically healthy men who were acutely unhappy with the service or distressed by relationships. They wanted to be discharged, and they became depressed, anxious, and suicidal. The graduate spent a day each

week on administrative tasks and supervision of technicians. He went to three weekly case conferences and three weekly clinic conferences. He saw about 30 patients weekly, including 2-4 new cases, 8-10 in continuing treatment, 10-11 in groups, and 7-8 quick re-checks of patients seen first by technicians. His was privileged with no specific restrictions to "prescribe psychotropic and adjunctive medication."

Interview: Graduate CC said he treated no more than a fourth of his patients with medication. He showed the roster of the pharmacotherapy patients he had during a recent 7-month period. It was a group of 17 active duty cases that included three women. Their primary diagnoses were major depression (5 cases), adjustment disorder (5), dysthymia (2), generalized anxiety (2), attention deficit (1), obsessive-compulsive (1), and schizoaffective (1). He treated the 17 people with 10 different agents that included paroxetine (11 cases), buspirone (3), clonazepam (2), fluoxetine (2), and one each with clomipramine, diphenhydramine, methylphenidate, risperidol, sertraline, and zolpidem. Graduate CC tended to see his patients 3-4 times and refer them to a counselor if symptoms abated. If symptoms continued, he prescribed an antidepressant and saw the patient weekly until there was a response. Such patients frequently stayed with treatment about three months and stopped. The graduate said the pattern often reflected learning to be a good soldier and that one of his missions was to keep soldiers in the field.

Although no longer mandatory, the graduate said he discussed psychopharmacology as needed with Dr. Dotter, an outpatient psychiatrist who proctored him for about seven months, or with Dr. Scheffer, Chief of Inpatient Psychiatry. As clinic director the graduate was Dr. Dotter's administrative supervisor, and he also was senior to Dr. Doter in rank. The two discussed cases as needed for a total of about an hour weekly. The graduate said that Dr. Dotter was a good psychiatrist and teacher, but used medications differently. For instance, Dr. Dotter tended to initiate several medications at once, and the graduate was uncomfortable with that practice. For difficult questions, he usually turned to Dr. Sheffler whom he regarded as the most pharmacologically sophisticated psychiatrist on the post.

Concerning the PDP, the graduate emphasized that a 2-year program—no more, no less—was best. He suggested selecting and training younger psychologists who might manage the promotion hurdles and stay in the service longer. Another suggestion was to provide for rotations through several kinds of clinical units during the proctorship.

Charts: The Panel reviewed 14 charts of pharmacotherapy patients. They were detailed and satisfactory. The graduate saw his patients frequently and carefully outlined symptoms, and followed-up "no shows" by phone. Choices of medication were logical extensions of the case presentations. He sometimes changed medications slowly so that response to treatment was slower than one might hope. In two cases a neuroleptic was reluctantly withheld because its use would have virtually dictated separation from service. In general, the charts showed little interaction with general physicians or other professionals.

Continuing education: Graduate CC said it was difficult to identify suitable CE opportunities this year. Some were too repetitive of past offerings. His administrative workload interfered with others. His isolation from other pharmacotherapy providers and the consequent

lack of stimulation was also a negative. He managed to do some consults via internet about soldiers deployed to Kuwait, and he did attend the American Psychological Association annual meeting. The graduate summed up matters by saying he learned more in the past year about the Army than about psychopharmacology.

Clinical supervisors: Dr. Orman, Chief of Psychiatry, said that he was available to the graduate for consultation, but the latter was now an independent provider. Dr. Orman described the graduate as a competent practitioner providing a valuable military service. Dr. Dotter, who had proctored the graduate for six months, completed his residency in June 1997 and arrived at Site #1 shortly thereafter. He was away on assignment at the time of the site visit, but the Evaluation Panel spoke with him by conference call on April 23, 1998. His comments generally supported the reports of Dr. Orman as well as the graduate. He said he was content with the graduate's standard of care and with his making diagnoses and judicious use of medications. He said, however, that his approval could not be unqualified because the graduate's chart entries were often tardy, sometimes more than two weeks. He regarded this neglect as a grave deficit, probably due, he said, to the graduate not having had the medical school and residency training that imprints the serious consequences of not charting. Concerning this issue, two points should be added: One is that the Panel's on site chart review did not report noting post-dated chart entries. The second is that when Dr. Dotter completed the Performance Assessment section of an Evaluation of Privileges form for the period 1/15/98-2/14/98 (about two weeks before the site visit), he rated the graduate as "excellent" (the highest rating) on the item "quality and timeliness of the medical record documentation."

Deputy Commander of Clinical Services: Dr. Gilman indicated he had heard of no quality assurance issues concerning Graduate CC.

Summary: From his very start on this assignment, this graduate was embedded in the division clinic where he treated only active duty soldiers. He had a vastly different experience from the other graduates. He learned how the Army works, how diagnoses work, and who needed to be treated. There was no question that he was helpful to active duty personnel even though he made limited use of medication. He, thus, contributed importantly to the combat readiness mission of the military. He said that he was comfortable with his assignment and that he considered a combat unit to be an appropriate duty station.

He functioned as an independent prescribing psychologist after he was awarded full privileges. He also continued to be isolated from interactions with other providers of pharmacotherapy. He wanted to add elements that would diversify his practice, and he wanted expert consultation to guide him to a broader use of medications. An increased use of his prescription authority ought also to counter the impression that the limited amount of pharmacotherapy he did was tantamount to improper utilization. Therefore, the Evaluation Panel reasoned that both the graduate and the military should profit from providing the greater diversity that would sharpen, maintain, and challenge his clinical skills. A part-time assignment in a family practice or in a primary care unit would be one means of providing the much needed diversity.

Graduate AD

Assignment: Graduate AD completed the PDP in June 1997 and after officer training reported to Site #6. His position was Chief of the Outpatient Psychology Service, one of five outpatient service units fully integrated under the umbrella of the Mental Health Directorate. The other four units were Outpatient Psychiatry Service, Community Mental Health Services, Social Work Service, and Alcohol and Drug Control Program. He had admitting privileges to the 25-bed inpatient unit but did not treat there or take night call. The Psychology Clinic logged an average of 420 visits monthly in 1997 and 684 visits in the most recent month of February, 1998. The graduate's duties encompassed three principal roles: clinic administrator, clinical services provider (primarily pharmacotherapy and psychotherapy), and faculty member of both the psychiatry residency and the psychology internship training programs.

The graduate was privileged a speedy 10 days after arrival at Site #6 to practice pharmacotherapy with DOD beneficiaries age 18-65, without unstable medical conditions. His formulary was as broad or broader than any other graduate's. It was inclusive by drug class, and it described "medications used to treat psychiatric disorders and other psychological, emotional conditions as well as the adjunctive medications often used." It included "currently existing medications as well as medications developed in the future." No exclusions were specified, and agents such as lithium, psychostimulants, MAOIs, thyroid supplements, "selected barbiturates," disulfiram, and nicotine patches were among the inclusions. A clear, detailed proctoring agreement was made part of the delineation of privileges. It named Dr. Humphreys, Chief of Outpatient Psychiatry, as proctor, and it required 100% prospective and retrospective proctoring of medication cases for three months. After that the proctor could reduce the rate monthly or quarterly to 10% of medication charts.

In the six months since he was privileged, the graduate treated 73 patients. Three-fourths were women, 23% were retirees and 52% their dependents—Columbus, GA is a favorite retirement area—and one-fourth were active duty soldiers or their dependents (10%). These patients were treated with 34 different medications (excluding vitamins), using an average of two agents per patient. About one-third of the prescriptions were for three SSRIs prescribed to 15-21 patients each. Other medication experience included: eight different neuroleptics, 1-5 patients each; five anxiolytics, 3-11 patients; three tricyclic antidepressants, 1-3 patients; two second generation antidepressants, 6-14 patients; lithium, 9 patients; and carbamazepine, 3 patients. The patient sample carried a total of 114 Axis I diagnoses: 49% depressive and mood disorders, 22% anxiety disorders, 12 % schizophrenias and dementia, 8% adjustment and relationship disorders, and 6% alcohol and substance abuse. The most common co-morbid medical disorders in this group were hypertension, arthritis and other joint disorders, hypercholesterolemia, and diabetes.

Graduate AD's typical workday was 7:00am-7:00pm. In a usual week, he evaluated two new admissions, saw about eight continuing treatment cases (nearly all receiving pharmacotherapy), worked one-half day in the walk-in clinic seeing 0-3 patients, and spent almost 30 hours on the residency training and group treatment programs. He met regularly with his proctor (1.0 hr weekly), the psychology clinic staff (1.5 hr weekly), the faculty of the training programs (2.0 hr monthly), and the chiefs of the five Directorate units (1.0 hr biweekly).

Interview: The graduate said he was very happy, and he seemed enthusiastic about his assignment. He said he was well-received by the psychiatry staff and enjoyed the opportunities to work with psychiatry residents. Most of all, he said he valued his excellent relationships with his proctor, Dr. Humphreys, and with the director of the mental health directorate, Dr. Sheehan. He said that he was most grateful that Dr. Sheehan wanted him to have broad experience and a wide formulary that could be continually updated to remain state-of-the-art. He usually carried about 30 individual patients. He typically saw them for about an hour evaluation and followed them weekly or biweekly in 45-minute sessions until improved. He and Dr. Humphreys co-supervised and directed a "psychoeducational medication" treatment program. The program provided treatment for relatively large numbers. Eight groups—three depression, two anxiety, two thought disorder, and one bipolar—of 5-10 chronic patients with persistent conditions met once quarterly for 90 minutes. The meetings were on Wednesday mornings for eight out of every12 weeks. A psychiatrist-psychologist pair of residents and a social worker aided the graduate and Dr. Humphreys in running the groups, and individual sessions to deal with such matters as prescriptions, review of laboratory results, and referral for consults supplemented the group work.

This graduate was more actively engaged in teaching than most other graduates. He planned lectures and seminars for the psychology residents. He said his teaching of psychopharmacological subjects was different as a result of the PDP, i.e., he saw a "whole person" rather than a "psychological issue." He developed a successful seminar series in psychopharmacology for psychologists. He was also teaching group therapy and interpersonal dynamics to psychologists and psychiatrists. There were numerous teaching and supervisory opportunities each week. He was involved in the supervision of the intake evaluations made by psychologist-psychiatrist pairs on Monday-Thursday mornings, when the graduate stood-by for anyone who wanted on the spot backup. Then, on Fridays the graduate and Dr. Humphreys held a disposition and planning conference for all intakes of the week. On Thursdays, they led a teaching conference focused on the group treatment program, each week for a different resident.

Charts: Site #6 is a tertiary care facility, and the charts reflected a diverse practice of interesting Axis I and III disorders. The 14 charts reviewed were uniformly excellent and appropriately detailed. The intake evaluations were careful and well organized. In all respects they appeared to be the work of a very sophisticated pharmacotherapist. His earlier charts were closely proctored. He used a combination of pharmacotherapy and psychotherapy with some patients and was very wise in his decisions. The strategies used reflected unusual concern for patient comfort and well-being. He asked for appropriate consultations. He refused to give medication if he thought it inappropriate.

Continuing education: Opportunities and credits for CE and CME were ample. He read six professional journals and five newsletters regularly. He read or re-read seven work related texts within the past six months. He accumulated 50 CE and 35 CME credits from attending special lectures and seminars by invited speakers, attending psychiatry grand rounds at Site #6, and completing a correspondence course in advanced psychopharmacology offered by UC—San Diego. He was responsible for developing the Army's annual one week course for mental health

workers to be held at Site #6 in 1998. He also earned some credits from lectures and programs he had presented.

Clinical supervisor: Dr. Humphreys completed a residency in psychiatry at Site #6 in 1995, and he returned to the base in August 1997 to run the Outpatient Psychiatry Service with the help of four psychiatry residents whom he supervised. He noted that he was cautious initially when Graduate AD arrived at Site #6 a month or so after his own arrival. One caution was to obtain a letter from the AMA informing him that it was ethical for him to proctor a prescribing psychologist. He embarked on his course as proctor with grave doubts and great interest. He said he would have liked to help end the program if he found it deficient. In the beginning, he said he looked scrupulously for weaknesses in the graduate but found none. He said he now had complete confidence in him. They cooperated in a wide range of clinical and teaching activities, and he said it made his work much easier. The two of them, he said, practiced alike, thought alike, had the same high work standards, and followed similar philosophies. He met with the graduate an hour a week for proctoring purposes, formal proctoring was already reduced to the minimum 10% of medication charts level, and the current plan was for independent provider status after one year. Almost continual informal consultation between the two went on in one way or another—at the treatment groups they conducted, in the supervision sessions they had with the same residents, and at the staff meetings and seminars. He said the graduate was very skillful, knew his limitations, and knew when to get a consultation. All patients treated at the mental health services had been medically screened by their primary physicians, and neither the graduate nor his proctor did physical examinations. The graduate also had no responsibility for medical boards. Asked to compare the graduate with residents, he noted that the graduate could function better than a lot of psychiatrists he knew, including board-certified ones.

Dr. Humphreys said he remained ambivalent about the PDP and its purposes. He said it was very important to know one's limitations. He commented that the medical staff at the base was split on the issue, and the head of the residency program opposed such training. In his view the military setting was a good place to test the concept and the product, but he doubted how much one could extrapolate to the civilian world. He said the presence of Graduate AD clearly lessened his own workload, and he suggested that the main practical advantage of having a prescribing psychologist at Site #6 was that fewer dependents were referred for civilian care. The graduate treated so many cases that he must have saved the Army a lot of money.

Psychology supervisors: Dr. Thomas, Chief, Psychology Department, and Dr. Southwell, Director of Psychology Internship Training, a neuropsychologist, both stated that they were absolutely delighted with Graduate AD's performance. They said he had improved patient care. The first benefit was that psychologists had many patients who needed medication, and the optimal referral was to the prescribing psychologist. The department, thus, was enabled to offer a wider range of treatments without shifting responsibility elsewhere. They cited, as an indicator of the graduate's acceptance, the fact that psychiatrists had referred him some senior officers as patients. A second advantage the graduate brought was improved in-house psychopharmacology education of psychology residents. He was an effective, stimulating teacher who without being simplistic and glib or too abstruse could present clear, well organized seminars. He got across a

better appreciation of when and for whom to seek consultation, and he conveyed a good picture of the hard work and commitment required of a prescribing psychologist.

Both Drs. Thomas and Southwell proposed the idea of a post-graduate prescribing psychologist program at WRAMC. Their said that it should be modeled on the existing Army post-doctoral psychology subspecialties in child, behavioral medicine, and neuropsychology. Dr. Thomas said he thought the collaboration between psychiatry and psychology had improved at Site #6 to the point that it currently was the best on any Army post. He and Graduate AB had worked with the state psychological association and a state university towards developing a licensing bill and building a training program for non-military prescribing psychologists. He proudly noted that the graduate had taken a strong stand on the side of high quality and rigorous training.

Deputy Commander for Clinical Services: COL Moore noted that Site #6 is the regional medical center for the Southeast. He described the functions of regional centers and their relationships to other Army medical facilities. He also said that he had worked with non-MD prescribers in the past. In his view they provided quality services. It was part of his job, he added, to keep an eye on deliverables and from that perspective Graduate AD's work had been very impressive.

Chief of Mental Health Directorate and of Psychiatry & Neurology: Dr. Sheehan was present in the meeting with Dr. Moore. He stated that Graduate AD was excellent and would do a superb job wherever he was assigned. He stressed that he was a good representative of the program. He described him as definitely more familiar with the medical model and medical issues than most psychologists and older generation psychiatrists. He said the graduate also worked better with psychiatry than most older model psychologists. He suggested that such doubly trained psychologists might eventually so outshine the older model as to cause career problems and change the identity of clinical psychology.

Chief of Pharmacy Services: COL Heath who was also present in the meeting with the above two said that he did not worry about well trained psychologists having prescription privileges. He said that the Army had a rigorous credentialing process and a good organizational back-up. For those reasons, he was comfortable with approving an essentially unrestricted formulary.

Summary: The graduate was generally well-integrated into the mental health department, was very productive, and received praise from everyone the Panel interviewed. He performed an enormous amount of work as clinic chief and as a pharmacotherapist for a moderate number of individual patients and many medication group patients. Most of his patients were retirees and, especially, their dependents—hardly the kind of practice anticipated by the original PDP objectives. The graduate also filled another major role as teacher-educator—especially in psychopharmacology and pharmacotherapy but also in psychological therapies—not only for psychologists and psychology interns but also for psychiatry residents. His prominence as teacher-educator was unique among the 10 prescribing psychologists.

Graduate BD

Assignment: Graduate BD completed the PDP in June 1997 and was then assigned to the outpatient service of the Site #1. His basic assignments were to the Psychology Clinic (3.5 days per week) and the Family Care Clinic (FCC) (1.5 days). In March 1998 he was granted admitting privileges to the 20-bed inpatient unit and began taking ER call. Most of his treatment cases were dependents who had been prescreened at the FCC for medical conditions. He also evaluated all Psychology Clinic patients considered for pharmacotherapy. As neither clinic had a psychiatrist on staff, the graduate had a busy practice. In a typical week he saw 20 new patients (sometimes 10 in one day) and 10-15 continuing treatment cases. On the average, about 20% were active duty soldiers, and the rest were dependents. Most of the patients he treated had affective, anxiety, or adjustment disorders. His typical day began at 8:00am and ended at 5:00pm, and he saw about two patients an hour. His scope of practice restricted his pharmacotherapy practice to 18-65 year-olds, and it excluded patients with unstable medical conditions. He attended two staff conferences and two inservice training meetings weekly and one case conference monthly; medication issues were rarely on the agendas.

Interview: He described a good relationship with his supervisor, Dr. Orman, Chief of Psychiatry and Psychiatry Consultant to the Army OTSG. He said Dr. Orman was usually available by phone, beeper, and in person. Specific guidelines for supervision were set forth in his scope of practice. He discussed every case with Dr. Orman during his first three months on post. The required proctoring was then reduced to 30%, and after six months reduced again to the standard minimum of 10% of pharmacotherapy cases. The graduate chose the cases for supervision, with the restriction that all patients on mood stabilizers or neuroleptics had to be proctored. Total supervision time was estimated at 1-2 hours weekly.

He provided pharmacotherapy for 30-40% of his cases. His usual practice with non-acute patients was to start medication, follow-up every two weeks for six weeks, then monthly. He was easily reachable by his patients, and he saw severely distressed people as often as needed. He described himself as conservative in the use of psychotropics, partly due to a reluctance to use medications that might stigmatize or impair performance. He reported with pride that he had spotted some medical conditions missed by the FCC staff who did the physicals and histories. One was a referral being treated with clomipramine and navane who became pregnant; he referred her on to psychiatry for management. He spotted hypothyroidism in another patient whom he sent on to endocrinology. A third example was that on his first day covering the ER he evaluated a patient who was taking the potentially lethal combination of terfenadine and fluoxetine.

The graduate said he was more than satisfied with his experience. He described his position as wonderful and a perfect fit with what he wanted to do. He said he had all the medications he needed on his formulary—including agents like clozaril, depakote, lithium, olanzapine, and respiridol. What he said was missing in his work was the opportunity to work alongside a psychiatrist in the clinic. He said he believed the staff at Site #1 saw him as an asset and viewed his position in the FCC as an ideal placement for a prescribing psychologist. Non-psychiatrist physicians and family medicine residents in the FCC seemed to him particularly to appreciate his contributions. He named one training advantage of the FCC as having clinic

physicians around to monitor the medical issues of their patients. He saw few active duty soldiers as patients because psychiatrists gave them priority. He said he thought he got along extremely well with the other psychologists on staff but that he had little occasion to interact with psychiatrists other than his proctor.

The graduate said his goal was to provide the safest and most competent care possible in the assessment and management of patients on medication. He thought that this personal goal was consistent with the purpose of the PDP. As a psychologist, his goals were centered around the importance of therapy, and with prescriptive authority he felt better able to facilitate mental healing. He did not think his role and work had changed the local relationship between psychology and psychiatry. Compared with the past, he now used his psychometric skills less than his psychotherapy skills. He still administered some MMPIs, but he referred most testing to other psychologists. He estimated that 90% of his patients were quite satisfied with their treatment outcomes. His opinion was that his best results were in treating panic, anxiety, and depression disorders.

Charts: The Panel reviewed 14 medical charts. The charts were quite good in general. The history and progress notes were terse but adequately reflected the patient's condition, test results, and indicated consultations. Symptoms were clearly described, and he manifested good judgment in his medical referrals and in following medical issues. He showed sensitivity to both pharmacological and biosocial aspects of treatment.

Continuing education: The graduate recently attended a 15-hour Harvard-sponsored psychopharmacology conference in Florida. He also attended a 3-hour conference in Dallas and some drug company dinners.. He said he subscribed to and read *Biological Therapies in Psychiatry* but that he had read no books on the subject in the past 7-8 months. The in-house conferences he attended at Site #1 rarely focused on medication, although he had made presentations on antidepressants. He made little use of the internet.

Clinical supervisor: Dr. Orman gave a very positive report, describing their supervisory relationship much as above. He reemphasized that patients who might need mood stabilizers or neuroleptics and patients with medical problems were discussed before treatment was started. He said the graduate took good care of his patients, but his pharmacotherapy was overly conservative. His psychotherapy skills were highly valued, and his pharmacotherapy skills were more usefully applied with dependents because of the general reluctance about prescribing psychotropics for active duty soldiers. The FCC assignment represented an effort to expose him to greater diversity. He said that the graduate had more time for combined pharmacotherapy-psychotherapy than the psychiatrists because they had to take on the more difficult cases and the medical board evaluations.

Dr. Orman said that the graduate knew less psychopharmacology than the average graduating 4th year resident, attributing it to the fact that he was only eight months out of training. In a few years he could become as good as the psychiatrists, but more inpatient work was necessary to help him attain that level. Nevertheless, Dr. Orman rated the graduate's performance and skills as "More than Satisfactory" to "Extremely Satisfactory" on all 12 items of the rating scale on p.3 of the *Guide for Interviews with Clinical Supervisors* (VI).

Psychology supervisor: Dr. Albornoz, Chief, Department of Psychology, had an MD from Europe as well as a PhD, but he was not licensed to practice medicine in the United States. He did not have prescribing privileges, but he took on-call for the ER and had admitting privileges. He met daily with Graduate BD on an ad hoc basis and regarded him as a major departmental asset primarily because patients who required medication no longer had to be referred to psychiatrists. He would be delighted to have 2-3 more prescribing psychologists to help the clinic provide comprehensive care, particularly for dependents.

Dr. Albornoz described the new Psychology Clinic collaboration with the FCC as an important step. Service to dependents was improved, providing not only fiscal savings but also better care, because many dependents referred off-base for health care never get there. A related factor is the serious service wide shortage of psychiatrists. At Site #1, for example, psychiatrists treated the active duty cases but had little time for dependents. Graduate BD stepped into the gap. Dr. Albornoz suggested that in meeting the mental health needs of dependents they contributed to Site #1's combat ready mission. His logic was that frequent deployment of active duty forces to remote stations put immense pressures on dependents, that improved and more reliable service to dependents boosted the morale of the active duty forces, and that result must go into the combat readiness equation. Thus, while the original rationale for the PDP program focused on the impact of combat on active duty personnel, the toll of combat on dependents provided an additional rationale.

Deputy Commander of Clinical Services: Dr. Gilman, who also headed the Quality Assurance and Risk Management Committee, said the command considered the prescribing psychologist program "transparent." This means, he said, there have been no incidents, no issues, and no patient complaints (with the exception of one psychiatrist who has voiced objections to the program). He agreed that the addition of the prescribing psychologist to the FCC staff was a real asset to patients, because getting mental health care there carried less stigma. He also said a big plus was that the outpatient program could be advertised as "Primary Care Plus," i.e., primary care and mental health management.

Dr. Gilman provided some background on the long military tradition of defining and deploying "physician-extenders" to meet unique military needs. He stated that the graduate was performing in that tradition. He pointed to physician assistants and nurse clinicians as examples of physician-extenders that were first conceptualized, trained, and credentialed in the military. He said that the PDP appeared to be a continuation of the tradition. Some members of the Evaluation Panel responded that "psychologist-extender" might be a more accurate model, i.e., the PDP worked by selecting a group of established, competent clinical psychologists and extending their capabilities.

Summary: Graduate BD demonstrated the value of placing a prescribing psychologist within a family care center. Many observations at this visit suggested that primary care facilities, such as the FCC, represent excellent placements for maximizing the strengths and minimizing the weaknesses of PDP graduates. Not only had the PDP effectively trained its graduates to use psychotropic agents, but also their PDP training and their clinical psychology training and experience had made them expert evaluators and assessors of the specific clinical indications for pharmacotherapy. Moreover, physicians were near-at-hand in most primary care centers to help

prescribing psychologists compensate for any medical weaknesses. This contrasts to the well known current and prevailing practice of non-psychiatrist physicians, relatively untrained in either psychiatric diagnosis or pharmacotherapy, writing most psychotropic drug prescriptions.

The Evaluation Panel noted with concern that Graduate BD's deployment in the Psychology Clinic and FCC, for all its positive value, effectively isolated him from psychiatrists. We were not convinced that the intensity of his supervision in psychopharmacology was sufficient. A similar pattern was apparent last year and, again, this year with the other graduate at this base. We remained puzzled about the source and extent of the problem. It might be attributable to the shortage at this base of psychiatrists who are expert pharmacotherapists.

Navy

Four of the 10 PDP Graduates were Navy Officers holding the rank of Lieutenant Commander or Commander. Two were trained as members of Group A and are coded as Graduates AA and BA. A third was trained with Group C and is coded as Graduate BC. The fourth was trained with Group D and is coded CD.

Graduate AA

Assignment: This graduate was a member of Group A, the first PDP class, and he completed the PDP in June 1994. Unlike subsequent classes, Group A had two years of didactic training at USUHS and a one year clinical practicum at WRAMC. Graduate AA was assigned to the Site #8 in July 1994, but it was May 1995 before he was privileged, and it was August 1995 before he saw his first medication case. LCDR Gerald Cohen was his first proctor at Site #8 until June 1996 when CAPT Ronald Smith became his proctor. At the time of the 1998 site visit the graduate was the clinical director of a small army clinic. Dr. Smith was the medical director and continued to be his proctor. The graduate's formulary was a list of specific drugs, and difficult to effect changes.

Graduate AA had a busy practice at two clinics. He worked three long days on Monday-Wednesday at the small army clinic, another long day on Thursday at the Naval Clinic, leaving Friday for other pursuits such as CME activities in Site #8. His practice included 60% active duty personnel and the rest were dependents and retirees. Most referrals were by primary care physicians in two nearby clinics. He had treated 362 patients since he obtained prescription privileges. They included 52% males, and their average age was 37, range 18-89. Less than 10% had an Axis III medical diagnosis. The graduate used pharmacotherapy with 40% of his patients. Most prescriptions were for the newer anxiolytics and antidepressants, especially SSRIs. He did not prescribe for people over age 65, but referred them to Dr. Smith when medication was indicated. In an average week, he saw 3-5 new patients and nearly 30 for follow up. He did not do physical exams, but did order laboratory tests.

Interview: The graduate said, and Dr. Smith later confirmed, that he and his proctor had an extraordinarily good relationship. Nevertheless, he remained in proctored instead of

independent provider status. Most of his supervision was ad hoc but he wanted and felt he had earned greater autonomy. He said he had concluded that PDP graduates should have only about one year of supervision.

He told the Evaluation Panel that his new assignment would begin soon, an 18-month tour of duty overseas. The post would be in a small hospital staffed by six family practitioners, a surgeon, and two medical officers. There never had been a psychiatrist there, and his formal privileges and formulary were undecided. The graduate said he was very excited about the challenge. He anticipated the "lone ranger" practice with enthusiasm. He hoped it would help him move closer to his long term career goal of practicing a variant of primary mental health by working with primary care physicians.

The graduate said he liked and enjoyed his current practice. His psychotherapy and psychometric practices were not much changed, he thought, from his pre-PDP pattern. His view of the PDP training was that it permitted him to evolve as a new species of clinician. His specialized training extended his usefulness for even his non-pharmacotherapy patients. He considered himself more attuned to pharmacologic and physiologic issues, and he was more sure that his patients were properly diagnosed and treated. He said that, in retrospect, he was very positive about the PDP and he would like to see it resurrected. He thought the military needed more psychologists who could prescribe drugs. He did not think the two pre-clinical years he had were needed, but he strongly approved the evolved version of the PDP. He suggested that the clinical practicum component of an adequate training program should require that at least 100 patients be managed psychopharmacologically.

Charts: The charts reviewed were generally excellent. They included extensive evaluations, exceptionally well-done histories, and sophisticated use of drugs. He utilized medical officers when there was a medical problem, and he picked up some medical problems missed by the medical officers. There was evidence of good interactions with previous providers and of empathic relationships with patients.

Continuing education: Graduate AA engaged broadly in a range of academic programs in the Site #8 area. He attended more than 30 seminars at USUHS, drug company seminars, the week-long Tucson, AZ psychopharmacology conference, a NIDA treatment conference, and the annual American Psychological Association meeting. He closely followed six important journals in his interest areas, and he read several books on psychopharmacology. He used the internet extensively for searches and for reviews focused on his current cases. He had plans for even greater use of the internet overseas.

Clinical supervisor: CAPT Smith said he was board certified in several specialties but considered himself a psychoanalyst and a drug and alcohol abuse specialist. He said that he and the graduate operated like a private practice team at Site #8, talking frequently throughout the day about patients and treatments. Dr. Smith said the graduate was the more biologically oriented of the two. Their practice included active duty personnel, many retirees, and

dependents. Dr. Smith said he decided that informed consent about prescribing psychologist status was not in the best interests of patients. He said that the graduate was an excellent, judicious practitioner and an excellent therapist. He also had cultured a referral base from the general medical officers in nearby clinics. The graduate had no problems making pharmacological decisions and was up to date on medications. Dr. Smith considered him a clear thinking, careful clinician who asked good questions and made good decisions. He said it would be safe to assign him anywhere. He then reported that the graduate will not be replaced at the small army clinic when he leaves, and that his own time as the only doctor in the clinic and will be cut to two days a week. Dr. Smith did not think the PDP should be resuscitated. It had merely proved that excellent people could be taught to prescribe, and that was not new. The important goal was to change medical schools: make them more humanistic and insist on better teaching. A new type of practitioner, the prescribing psychologist, was the wrong answer in his opinion.

Chair, Site #8 Psychology Department: Dr. Glogower said the graduate was a true asset to the department. He had improved the collaboration between psychology and psychiatry. He benefited the patient population because of his diverse skills. He taught a psychopharmacology course at Site #8 for 4-5 psychology interns, and he supervised a psychopharmacology mini-rotation of interns at the clinic. Dr. Glogower said there was a shortage of military psychiatrists in the Capital Area and the graduate filled a need at the small army clinic.

Chair, Site #8 Psychiatry Department: Dr. Dinneen had been at Site #8 since 1989, and formerly headed the psychiatry residency training program. He said that the graduate was collegial and congenial in their contacts about five cases they had shared, he thought the graduate possessed a useful understanding of physiology in multi-system disorders. He did not believe, however, that he was adequately knowledgeable about medical disorders, but he agreed he was good at getting consultations.

Chief of Medical Staff: CAPT Wade said that the graduate fitted in well and he had heard only laudatory comments. He agreed with Dr. Dinneen that lithium should not be on his formulary. He said there were enough Navy psychiatrists and psychologists to take care of active duty people but not enough for dependents and retirees.

Summary: In the three years since receiving prescribing privileges, the graduate treated a medically uncomplicated group of 362 patients. Their psychiatric diagnoses were concentrated in the depression, anxiety, and adjustment-relationship problem spectra. He treated about 40% of them with psychotropic drugs, i.e., he initiated pharmacotherapy with an average of fewer than five patients monthly. The overwhelming proportion of his prescriptions were for the newer anxiolytics and antidepressants, particularly SSRIs. The rational bases for exclusions from his formulary were never made clear to the Evaluation Panel. Lithium remained unavailable; olanzapine had been added; he also wanted mirtazapine and more newer antipsychotics and mood stabilizers.

Graduate AA and his psychiatrist supervisor appeared to have a splendid partnership. They liked each other and worked well together in a small but busy clinic where they frequently talked patients and treatments. The intensity of the formal supervision of the graduate had long since dwindled to an almost unnoticeable difference from the peer review standard. Nevertheless, nearly four years after completing the PDP and three years after credentialing, Graduate AA continued in proctored status. It appeared to be due to the question of "medical safety." No one questioned his medical safety at the level of knowing his limits and knowing when to ask for help. Instead, the reservations about his medical safety were pegged at the level of knowing less about medicine than a medical school graduate who had completed residency. Such a standard, of course, would bar forever the door to independent provider status for a prescribing psychologist. For Graduate AA, the issue may be moot. He appeared well on his way to achieving autonomy by transfer (overseas).

Graduate BA

Assignment: This graduate was a member of the first PDP group that completed the program in June 1994. His class had two years of didactic training at USUHS and a one year clinical practicum at WRAMC. His first post-graduate assignment was Site #7, 1994-97. He transferred to Site #5 in July 1997. At the time of the 1998 site visit, he was assistant head of the mental health department and head of the department's outpatient clinic. The department staff included three psychiatrists, three psychologists, five technicians, and a psychology resident. The clinic had about 1000 visits quarterly. The graduate could admit to an 8-bed inpatient unit, but he could not treat there. He had limited privileges and a restricted formulary. He could prescribe only for active duty personnel—no dependents, no retirees. His formulary was a list of specific agents that included 13 antidepressants, 9 antipsychotics, 9 anxiolytics, 4 adjunctive agents, and disulfiram. He could refill lithium and depakote prescriptions, but neither initiate nor stop either. His formulary did not include the newer antipsychotics, and methylphenidate had been removed from the formulary he had at Site #7.

In a typical week the graduate saw about five new cases and 15 continuing treatment cases. Each day began with a 10-20 minute staff meeting for review of inpatients and problematic outpatients. This meeting was where the graduate's proctoring took place. After staff, the graduate had several hours for continuing treatment visits, followed by a new patient evaluation. His referrals came from family practice, other psychologists and psychiatrists, physicians in the field, and clinic admissions. He went at least one afternoon weekly to the brig (a detention facility) to evaluate and treat. Other afternoons he ran treatment groups, saw more follow-ups, supervised his psychology resident, and taught family practice residents. Sometimes he had collateral contacts with patients' commanders and with lawyers in regard to sanity boards. He took night call for the ER five times a month, and he might see 0-10 patients nightly.

Interview: The graduate was a hard working career military officer with high standards for himself and others in the military. He felt that the PDP had not advanced his military career

and that he might soon have to accept retirement. Graduate BA's case statistics on approximately 200 patients seen since July 1997 indicated that most were depression, anxiety, or adjustment spectra disorders. He treated only about 13% of his patients, including brig cases, with psychopharmacological agents. He relied almost exclusively on SSRIs, especially sertraline, and antianxiety agents, especially clonazepam. His prescriptions generally were appropriate to his diagnoses, and only occasionally did he prescribe more than one agent at a time. The evaluation report that he presented was generally good and recommended him for promotion. He was rated "above standards" or "greatly exceeds standards" on all attributes except one; the attribute "contributes to unit cohesiveness and morale" was rated "meets standards."

He said most of his proctoring took place in the daily staff meetings referred to above. His proctor was his department head, Dr. Ho, a psychiatrist. The graduate explained that "proctor" meant to mentor without taking medical responsibility for the practice. He said that his proctor also regularly monitored 10% of his medication charts.

Much of the graduate's time was occupied with running the clinic. He arrived on post July 2, 1997, but his formulary was not approved until October 4, 1997. The delay and the restrictions were upsetting at the time. He wanted an expanded formulary based on drug class. He said the psychiatrists at Site #5 made known their opposition to granting him prescription privileges and that his problems at Site #7 probably had followed him to Site #5. He commented that his rate of prescribing for active duty patients was about the same as the psychiatrists, and their higher overall rate was because they treated dependents. He said that his work at the brig relieved psychiatry from the responsibility, and that was probably the chief impact he had on psychology-psychiatry relations at this post. He commented that assignment to a remote post without psychiatric and psychological back-up might more effectively have utilized his abilities.

Asked about the PDP, he said he had benefited greatly as a psychologist. He did everything differently now. He said he was more attuned to the biological aspects of patients, especially to how physical symptoms relate to medical illnesses, psychiatric disorders, and drug side effects. Such knowledge made him a better therapist. His method of informing patients that he was a prescribing psychologist was a sign on his office door, and he usually spoke about it when he introduced medication into the treatment. He preferred the 2-year version of the PDP, and said he would support nothing less. On the other hand, he said his participation had derailed his military career, and for that reason he would not do it again.

Charts: The Evaluation Panel examined 14 records of pharmacotherapy patients. They were generally adequate but not exemplary. There was a strong focus on fitness for duty, and his work reflected a good balance of concern for the patient and the service. Some charts were shadow records, and it was not always possible to get the full picture. Others, such as a case of a Marine who had committed a dramatic crime, included much more history. Suicidal ideation and action taken were appropriately noted. Drug selection was congruent with diagnosis. The laboratory tests ordered were reasonable. He seemed to use cognitive therapy and relaxation procedures judiciously. Significantly, he recognized a probable case of hypothyroidism, ordered tests that proved positive, and referred to a physician.

Continuing education: He taught one psychopharmacology course for psychologists using 300 slides he prepared and another course on medical aspects of psychology. He used the internet somewhat, and he read several journals (*J. Clin. Psychopharm., Am. J. Psychiatry, J. Clin. Psychiatry, Biological Therapies).* He said he bought and read many books in the area.

Clinical supervisor: Dr. Ho said his relationship with the graduate was very cordial and mutually respectful. He had no questions about his competence with psychotropic medications. Their proctoring interactions were largely perfunctory. He said the graduate saw a large volume of patients and provided high quality assessments and treatments. He commented that the graduate had an outstanding military bearing and set high standards. He reckoned that the strong personality and solid military core values might not go over well with patients who wanted a more tolerant, non-judgmental therapist. Such personal characteristics, Dr. Ho said, might intrude more into psychotherapy than pharmacotherapy.

Dr. Ho told the Evaluation Panel there were enough psychiatrists on the post to handle inpatient and outpatient visits that required medication management. Therefore, he said, he had assigned brig coverage to the graduate. Dr. Ho also mentioned that there was pressure from psychiatrists at Site #5 not to grant privileges at Site #5. For that and other reasons, the privileges the graduate had at Site #7 were not expanded when he transferred. Dr. Ho emphatically stated he would not expand the privileges to allow him to treat dependents and retirees.

In the latter part of the interview, Dr. Ho and Dr. Lyszczarg, an inpatient psychiatrist who joined the group, reported two incidents of what they considered mistakenly managed patients. Dr. Ho said he was required to intervene and transfer the patients to another provider. He said both psychological treatment and pharmacotherapy were involved. In addition to these two cases, Dr. Ho said some of the graduate's cases had complained about a lack of empathy and a "too military" attitude.

Two psychiatrists—the graduate's proctor (also department head) and an inpatient psychiatrist—reported two examples to support their doubts about his diagnostic treatment and/or management skills, particularly with psychotic patients—a group, incidentally, shut-off from him for the past four years. It appeared to the Evaluation Panel that the graduate's problems were *not* primarily due to lack of knowledge about diagnoses and medications. They seemed more related to his military background and a perspective associated with personality attributes.

Director of Medical Services: CAPT Richard Jefferies was a family practice osteopath. Credentialing processes were part of his jurisdiction. He said that the decision to continue the proctorship for another year was made in communication with Site #7 before Graduate BA arrived at Site #5. His current proctoring was retrospective, and it applied to 10% of his medication charts. That level of quality assurance is the same required for all physicians, but, in Graduate BA's case, it is performed by a specific proctor.

Dr. Jefferies said he was generally pleased with the graduate. He said he knew of no complaints or incidents and no quality of care problems. He added that the graduate used consultation properly. Dr. Jefferies had concluded that because the PDP was terminated the graduate would not be replaced. Therefore, the administration would not tailor a program for the graduate. Dr. Jefferies allowed that Graduate BA relieved the pressure on staff psychiatrists who became busy when they took on more dependents. He said that if Dr. Ho wished it, there was no reason for the graduate not to prescribe for dependents.

Summary: Graduate BA was one of the first two graduates to complete the PDP and was in his fourth post-graduate year. Nevertheless, he continued to be proctored, he had a limited formulary, and he had a highly restricted practice. He treated moderate numbers of patients, and they presented a narrow range of relatively mild pathology. He rarely prescribed medication. When he did it was mostly SSRIs. Thus, his prescribing abilities were underutilized. Specific psychiatrists in authority have blocked him from a wider practice of pharmacotherapy with dependents, retirees, or psychiatric inpatients of any type. Except for one psychiatrist at one of his two post-graduate sites, there was no evidence that he was welcomed or regarded as a potential asset by the psychiatry establishment. Given these actively hostile milieus, it is extraordinarily difficult to interpret the reports in the following paragraph, or to separate what is training and what is individual from what is situation. For exactly such reasons, the Evaluation Panel had repeatedly warned against such assignments. Given the circumstances, it was remarkable that his performance was highly creditable according to everyone we spoke with.

Graduate BC

Assignment: This graduate completed the PDP in June 1996 and was assigned to the mental health department of the Site #4. The department operated a 10-bed ward and an outpatient clinic. Site #4 was not extremely busy with active duty patients, and it had begun recently to accommodate more dependents—prodded by a capitation system. Graduate BC was made assistant head of the department in August 1997 and acting head in March 1998. He expected to serve until a designated senior psychiatrist arrived in October 1998. The department staff included three psychiatrists and two other psychologists. Graduate BC's scope of practice provided for him to prescribe independently. His formulary was broad and by drug class. He could prescribe for inpatients and the full spectrum of outpatients—active duty sailors, inductees, dependents, and retirees within ages 18-65. The clinic's mode of operation provided for frequent interactions among the psychologists and psychiatrists. Thus, the graduate and the psychiatrists discussed among themselves virtually every initiation of medication by any one of them. Perhaps, more than at other stations, the active duty status of patients on ships and submarines placed constraints on decisions to medicate. It was usually necessary to arrange for limited duty before starting a regimen. The graduate's privileges included physical examinations, but neither he nor the psychiatrists did them.

Interview: On a typical day, the graduate arrived about 7:30am for ward report and a 15-30 minute ward meeting. He then did administrative work until 9:00am when appointments began. He evaluated 4-5 new patients and followed 10-15 treatment patients per week. He had

admitting privileges, and he took on call duty for emergencies and for hospital admissions every fourth week. He admitted about 1-2 patients monthly. One day each week he had triage duty and covered the ER where he might see 2-10 patients. Medical boards consumed much time. His only use of psychological tests was 5-10 *MMPI*s weekly, but he supervised the psychometric work of the other psychologists. He did no group therapy.

Referrals came from command and from ship medical officers, a walk-in clinic, a family practice clinic, and the ER. He estimated that 25% of his practice was pharmacotherapy, and the other 75% was psychological or behavioral therapy. He used a limited number of drugs—mostly SSRIs and buspirone. Many patients presented with the question of fitness for duty, i.e., serve or be separated? There was no sign-off requirement on anything he did clinically, but he had the same peer review checks—10% of charts monthly—as anyone else. He regarded his privileges, scope of practice, and formulary as appropriate to his psychopharmacology training and skills—which he rated at level of a new post-resident psychiatrist. (He was far above that level in knowledge and competence in other mental health skills.) He could independently start and stop medication with active duty cases, but he was required to consult before doing either with dependents. He also was expected to discuss concomitant medical conditions with the supervisor. Most supervision took place in the daily ward interactions where he and the psychiatrists discussed all their cases. Otherwise, he sought it as needed. His estimate was that his total supervision was 90 minutes weekly.

He reported that he was pleased with the PDP, and in his opinion it should retain its one year didactic and one year practicum format. He said the PDP training had extended his usefulness to the Navy without separating him from his identity as a psychologist. The PDP enabled him to see the biological and bodily aspects of people totally differently. As a result he had become a stronger asset to the hospital and to patients. He could better coordinate medical treatment, he could advocate for better medical treatment of patients, he could write more appropriate consults, and he could make better dispositions. He reported his concern about granting prescribing privileges to clinical psychologists in the general community. He regarded them as generally naive about medical and biological matters, and he feared that without rigorous training there would be problems.

Charts: The Evaluation Panel reviewed 14 recent charts and considered them about average in quality. Most were appropriately noted. Dosages and drug changes were indicated. Overall, they seemed too abbreviated. He generally provided a clear basis for considering medication use. One inpatient chart provided a good, clear description which captured the interaction of psychiatric, obstetrical, and personality issues.

Continuing education: He taught psychopharmacology and general psychology to family practice residents who rotated through his service. He was a curriculum consultant to a Ph.D. program in clinical psychology, and he was an instructor of an introductory psychology course at a local college. He read psychiatric journals and occasionally attended a psychopharmacology update course. He did not use the internet much.

Clinical supervisors: The Evaluation Panel met with two psychiatrists, Dr. Berdecio, Head, Mental Health Department, and Dr. Carroll, Head, Alcohol Rehabilitation Department. Both said they were extremely pleased with the graduate's skills. They saw him as a superb clinician who asked for help when he needed it, and who knew when to consult and when to refer. They had no problems with his prescribing abilities. They differed, however, in attitude toward the PDP. Dr. Berdecio said that the armed services had much experience training adjunct prescribers and had done a good job in each case. He said that the PDP was a good idea, that two years was long enough to turn out a good result, and that he was sad to see it stopped. He emphasized, as have many, that the group oriented teamwork that characterized the military was what made the adjunct prescribers so valuable. He thought the model would not work for solo providers in the civilian world. He suggested that it probably would be dangerous.

Dr. Carroll was relatively new to Site #4, and he was junior in rank to the graduate. He agreed with the graduate that their supervisory relationship was informal, largely ad hoc, and absorbed about an hour per week. He expressed strong support for the graduate. He thought that his leadership abilities and good common sense could be trusted, and he also believed that his training had made him more valuable to the hospital. On the other hand, Dr. Carroll expressed strong reservations about the PDP. He said it was expensive, his opinion was that the graduates would always lack medical skills. He simply would not accept that two years of training could replace four years of medical school plus four years of residency. The Panel received a copy of Dr. Carroll's evaluation of Graduate BC, and the performance ratings were uniformly "outstanding."

Administrative supervisors: CAPT Parker, Commanding Officer, and CAPT Mottet, Director of Medical Services commented that Graduate BC was made department head because they trusted him. They described him as insightful, well-rounded, multi-talented, and an important additional option. They said there had not been one single complaint about him. Dr. Mottet added that another factor in his favor was that he had run an alcohol treatment program. They suggested that in the military prescribing psychologists can work as collaborators and complements to psychiatrists, but they maintained that pairing would not work in civilian life. They said a parallel to the psychiatrist/prescribing psychologist pair is ophthalmology/optometry. In the military they collaborate and complement, in the civilian world, they compete.

Summary: Graduate BC said he liked his assignment, and all indications were that he was doing extremely well. There was much evidence that he was well liked and much respected. His Navy career has been enhanced by every step he had taken, he said, and he appeared ready for the next challenge. He prescribed for only about one-fourth of the patients he treated and he had gained some experience with drugs other than SSRI antidepressants since completing the PDP. While this low rate and narrow range of pharmacotherapy looked like underutilization, the graduate probably differed minimally in his prescribing practices from the psychiatrists at this base.

Graduate CD

Assignment: After completing the PDP in June 1997, this graduate reported to Site #7 in July 1997. He was placed under an approved supervision plan as a prescribing psychologist and began seeing medication patients in late July 1997. For his first three months, all initial interviews with medication patients were held conjointly with Dr. Stewart, a psychiatrist and his proctor. His first office was in the hospital and next door to hers. Sometime after his initial three months, he moved to the Mental Health Clinic, where he became clinic chief in March 1998. The clinic was remote from the hospital, and his duties no longer involved hospital patients. As chief, his main duties were to oversee the administrative operations for routine outpatient care, supervise psychology interns and two non-licensed psychologists, and provide consultation, evaluation, and treatment in psychopharmacology. The graduate remained in a proctored relationship with Dr. Stewart after the three months, but she reduced the intensity to retrospective review of 10% of his medication patient charts. In addition, consultation with her was required before initiating lithium or an antipsychotic. The graduate and Dr. Stewart maintained contact mostly by phone and e-mail.

It appeared that this medical center, despite their prior experience with another graduate, was unable to manage the credentialing of Graduate CD properly. There were delays, mistakes, and misunderstandings in the process that held up the final approval until very shortly before the site visit. The formulary recommended for Graduate CD was the same one Graduate BA had when he transferred to Site #5. It listed 40 specific agents: 10 antipsychotics, 15 antidepressants, 9 anxiolytics, 2 mood stabilizers (lithium, valproic acid), disulfiram and naltrexone, pemoline and methylphenidate. He was not allowed to use carbamazepine, clozaril, or MAOIs. The graduate's request that Adderall be added to the formulary was approved several weeks before his main formulary was approved.

Between August 1997 and April 1998, Graduate CD treated 120 patients. Their age ranged from 18-59, and 82% were below age 40. Two-thirds were males, and 90% were active duty. Most patients presented depression, anxiety and adjustment spectra disorders. Two-thirds of his patients received pharmacotherapy, and he prescribed 18 different agents. More than two-thirds of his prescriptions were for the newer antidepressants, especially SSRIs. He prescribed a tricyclic antidepressant occasionally, and a few patients were given mixed re-uptake inhibitors. Another 10-15% of his prescriptions were for anxiolytics. He had a larger number (18) of attention deficit disorder patients than we have seen elsewhere, and 14 patients received methylphenidate.

Interview: The graduate described his program at Site #7 as a good job, but the enthusiasm observed during his clinical practicum year was less manifest. He said he was pleased with his supervision, and that the less formal current relationship with Dr. Stewart was a good one. He seemed proud that he could exercise considerable independent judgment in his practice. He thought there was no objection from psychiatry about his credentialing and that both Drs. Stewart and Knowlan had been supportive through the process. He had attended some psychiatry grand rounds and seminars in his first months at Site #7 but this lessened after he moved to Site #7.

Site #7 was located near the naval base and the ships and was easily accessible by patients. The graduate got referrals chiefly from the other psychologists, but also from ship doctors and from primary care physicians at a nearby clinic. He had occasional referrals from psychology interns, psychiatry residents, and psychiatrists. A number of cases were carried over from Graduate BA who preceded him at Site #7. He saw about 10 new and 20 continuing patients in a typical week. He scheduled 1-2 new patients on all mornings except Friday. His follow up cases were concentrated into Tuesday-Thursday afternoons. He often saw patients several times before prescribing medication. Once he began he would see the patient every few weeks, until the patient went back to duty, took limited duty, or separated from service. On Monday afternoons he ran a phobia clinic that utilized behavioral treatments to serve active duty sailors whose phobias were often uncovered during gas mask training or in submarine training. He said the clinic had an 85% success rate. He continued to see four psychotherapy patients a week, and many of his medication cases were in psychotherapy with another psychologist. He did not do physicals or take night call, and he had almost no interactions with ER. He could write medical boards but they required co-signatures.

In addition to the above information, Graduate CD noted that a big advantage of having a prescribing psychologist in the clinic was that patients did not have to be referred across town to a different service for treatment. The graduate said he had little interaction with psychiatry residents or psychiatrists (other than Dr. Stewart), and admitted he did not care for this isolation. He was able to interact somewhat with some medical officers around some patients. He felt, however, that taking the position of clinic director was an important career move. (Others confirmed that accepting the position was in his best interests careerwise.)

He said he loved his PDP training and fellowship. He particularly liked the diversity and range of severity of the inpatient rotation. His opinion was that the PDP adequately prepared psychologists to apply psychopharmacology in their clinical practice. He named two advantages of prescription privileges to psychologists as enabling them to offer increased care and as making it possible to put psychopharmacological resources on posts where there were no psychiatrists. As a result of his training, he was more aware of medical-psychopharmacological issues, and he dialoged more with psychologists about psychopharmacology. Patients and psychologists asked him more questions about medications. Reflecting further, he said he strongly believed the first year was necessary. The anatomy, physiology, and pharmacology were very important. However, he thought many of the courses were not tailored optimally to the needs and prior training of clinical psychologists. He said the clinical practicum year was very necessary, and that an inpatient rotation must be included.

Charts: The Evaluation Panel considered his charts to be excellent. The chart notes were extremely well organized, succinct, almost always typed, and generally showed good psychopharmacological judgment. Concomitant medical conditions were thoroughly noted in initial evaluations and in summaries. His records were very complete. His family histories were thorough. He took blood pressures when indicated. He followed response to treatment and

provided the logic behind his treatment decisions. The charts revealed a mature and 'savvy' clinician using medications to extend his abilities to help patients.

Continuing education: He taught a psychopharmacology course for the psychology interns that met 90 minutes biweekly for a year. He planned to seek diplomate status in clinical psychology. He recently completed training in the use of two important psychometric procedures, the WAIS III and the WMS II. He attended a psychiatric conference in Florida where he attended seminars on psychopharmacology, cognitive therapy, and brief psychotherapy. He subscribed to and read many important journals with psychopharmacology content, and he had purchased and begun reading some leading texts.

Clinical supervisor: Dr. Stewart was not eager to undertake the responsibility for proctoring a second prescribing psychologist, but she accepted the assignment. This was fortunate because Dr. Stewart, an extremely competent psychopharmacologist, was well suited by training and temperament for the assignment. Dr. Stewart got along well with Graduate CD, and she said she found him to be a thoughtful, responsible, and competent psychopharmacologist. She had confidence in his good judgment. Since his current caseload was a young, healthy, and active duty group, he rarely needed lithium or antipsychotics. (He actually used resperidone once at Site #7.) Within those parameters, she had no reservations about the medical safety of his practice. It was, in fact, his presence in Site #7 that made it possible to deliver medication to personnel at this satellite clinic. She told of the graduate's unusual eagerness to learn, and said that he sat in on courses she gave in consultation, liaison psychiatry, and clinical neuroscience. She reported that everyone in her neuroscience course, including a neurologist who lectured about EEGs, was amazed by his knowledge.

Of the two graduates who trained at Site #7, she noted no major difference in medical knowledge even though one had the additional year of pre-clinical training. Her opinion was that Graduate CD was the more sensitive and empathetic interviewer who got more data and better histories, and, therefore, made better decisions and gave better care. Medically, she regarded both as about 3rd year medical school level, and she said that they both knew enough to function safely given adequate backup. She said she was comfortable referring patients to Graduate CD, and she thought that his performance at Site #7 had improved the relations between psychiatry and psychology.

Head of psychiatry: Dr. Knowlan noted that he had stayed out of the day to day operations involving Graduate CD. He knew from Dr. Stewart that the graduate had done a good job. Dr. Knowlan said he selected Dr. Stewart as proctor because of her even disposition and her ability to not make things worse. He indicated that the graduate appeared to him to be a fine individual and a responsible clinician of high integrity, and he estimated his knowledge of psychotropic medication to be at the PGY II to PGY III level. He added that tension was introduced by having a prescribing psychologist in the psychiatry department. He compared it with having a resident he did not ask for because it tied up a staff person's time. Graduate CD, for example, consumed a large amount of Dr. Stewart's time initially, although that was no

longer the case. He could, in fact, now see payback coming because Site #7 offered pharmacotherapy to patients who otherwise would be referred to psychiatry. Dr. Knowlan appeared to view prescribing psychologists and psychiatric residents as very separate groups without considering the positive contributions the former might make to his residents.

Head of psychology: Dr. Cross said that Graduate CD was doing a very good job and that he was much appreciated by his patients and his co-workers. He said he regarded him as an outstanding clinical psychologist who was now better able to help the active duty population because of his special training. There was discussion about the graduate's increased isolation from psychiatry. Dr. Cross did not agree that he should be interacting more with psychiatry, but maintained that he was using the graduate in the best way for this post. The remaining time with Dr. Cross involved narration, discussion, and speculation aimed at accounting for the disconnects, errors, and mishaps in the credentialing-formulary episode.

Deputy Commander, Site #7: CAPT Cullison stated that the PDP program was basically a plus. From his perspective the PDP allowed Site #7 to provide expanded psychopharmacological coverage. He noted that there had been no bad reactions and no inappropriate use of medications. He said that an advantage of the program was that Graduate CD could work closely with his patients both medically and psychologically, and if psychiatry could off load some work to psychology that would be a good thing. Thus, he seemed to feel quite positively about the graduate's contributions to the medical center.

Summary: Less than one year after his PDP training, this prescribing psychologist functioned at a high level of autonomy. He directed a small but very busy satellite outpatient clinic for active duty sailors. The clinic was staffed by psychologists and psychology interns. The graduate was the sole provider of psychopharmacological evaluations and pharmacotherapy. Two-thirds of his continuing treatment cases were on medication. Most patients were young with minor (if any) medical problems. Their problems were concentrated in the adjustment, anxiety, or depression disorder spectra. The large majority of prescriptions were for anxiolytics and antidepressants, especially the SSRIs. His proctor had intensively supervised every one of his pharmacotherapy cases for the first three months of his tour at Site #7. The intensity of supervision was then speedily reduced to the current level of a minimum 10% of medication charts review, advance approval of use of lithium or antipsychotics, and as needed telephone and e-mail consultation. The supervisors and clinicians with whom the Evaluation Panel spoke were in consensus that Graduate CD was highly competent and medically safe within the parameters of his practice. A critical component of this assessment was that he knew his limitations, especially medical, and he knew when, where, and how to get help.

List of Appendices for DoD PDP Final Report - May 1998

APPENDIX I

SUMMARY OF EVALUATION PANEL MEMBER CREDENTIALS

SUMMARY OF EVALUATION PANEL MEMBER CREDENTIALS

(All Panel Members are Members of Fellows of the
American College of Neuropsychopharmacology)

Murray Alpert, Ph.D. is Professor of Psychology and Director, New York University - Bellevue Hospital Department of Psychiatry; Director, NYU - Bellevue Clinical Psychology Internship Training Program (1975-84); Associate Director, Millhouser Laboratories for Research in Psychiatry and Behavioral Sciences, NYU School of Medicine. He has published extensively. Dr. Alpert has served as a member of NIMH research review committees (1982-90) and has been the recipient of a number of USPHS grants. Dr. Alpert is a licensed clinical psychologist.

Burt Angrist, M.D. is Professor of Psychiatry, New York University School of Medicine, and Staff Psychiatrist, New York Veterans Affairs Medical Center. He has published extensively. He holds a New York State Medical License (#090212) and is Board Certified in Psychiatry (#12628, October 1973) by the American Board of Psychiatry and Neurology.

Malcolm B. Bowers, Jr., M.D. is Professor of Psychiatry and Associate Chairman for Clinical Services, Yale University School of Medicine. Dr. Bowers was Associate Director of the Biological Services Training Program in Psychiatry and Director of Graduate Education (1986-90) for the Department of Psychiatry at Yale. Dr. Bowers has published extensively. His primary focus has been in the area of schizophrenia. He has been the recipient of a number of NIMH research grants and has been a member of several NIMH research review committees. Dr. Bowers is a board certified psychiatrist.

Paula J. Clayton, M.D. is Professor and Head, Department of Psychiatry, University of Minnesota Medical School. She has published extensively. Dr. Clayton holds medical licenses in Minnesota (#25940) and New Mexico (#96-217) and is Board Eligible.

C. Keith Conners, Ph.D. is Professor of Medical Psychology and Co-Director NIMH Training Grant on Methodology in Clinical Research, Department of Psychology, Duke University Medical Center (1989-present). He has published extensively. Dr. Conners has been a consultant to the Food and Drug Administration, the American Academy of Child Psychiatry, and the Department of Psychology, Walter Reed Army Medical Center. Dr. Conners has had extensive experience in the diagnosis and drug treatment of children and adolescents with Attention Deficit Disorder and Depression. He has published extensively. He has been the recipient of a number of NIMH grants and has been a member of several review committees of the NIMH. Dr. Conners is a licensed clinical psychologist.

Jean Endicott, Ph.D. is Professor of Clinical Psychology, Department of Psychiatry, Columbia University. She has published extensively. Dr. Endicott's clinical psychologist's license (#003128) is in the State of New York.

David M. Engelhardt, M.D. (deceased November 1994) was Professor Emeritus of Psychiatry, State University of New York Health Science Center, Brooklyn, New York and had published extensively throughout his career. He served as consultant to numerous NIMH agencies. Dr. Engelhardt was a certified Mental Health Hospital Administrator and a board certified psychiatrist (State of New York #35011).

David S. Janowsky, M.D. is Professor, Department of Psychiatry, School of Medicine, University of North Carolina, Chapel Hill, N.C. His M.D. is from the University of California--San Francisco (1964). Dr. Janowsky has been involved in residency training programs for the past twenty years. He was a senior co-author of the ACNP *Model Psychopharmacology Curriculum for Psychiatric Residents.* Dr. Janowsky has been an examiner on the American Board of Psychiatry and Neurology and is the author of *Psychopharmacology Case Studies* a training and review manual presenting clinical cases and asking questions using a multiple choice format. He has written extensively on the diagnosis and drug treatment of alcohol and drug abuse, and depression. He holds medical licenses in California, North Carolina, and Tennessee and is Board Certified in Psychiatry (1971), American Board of Examiners in Psychiatry and Neurology.

Douglas M. McNair, Ph.D. is Professor of Psychology and Director, Clinical Psychology Ph.D. Program, Psychology Department, Boston University (1980-91). He is also Director, Clinical Psychopharmacology Laboratory, Psychology Department, Boston University (1980-87). Dr. McNair has published extensively. Dr. McNair is a member of the American College of Neuropsychopharmacology (ACNP) Task Force on Psychotropic Drug Prescribing Privileges for Nonphysicians. Dr. McNair has served as a consultant to the National Institute of Mental Health (NIMH) and the Food and Drug Administration (FDA) and the American Psychological Association (APA). Dr. McNair is a licensed clinical psychologist.

Oakley S. Ray, Ph.D. is Professor, Departments of Psychology and Psychiatry, and Associate Professor of Pharmacology, Vanderbilt University. He has published extensively. His clinical psychologist's license (P-000239) is in Tennessee. Dr. Ray is the Executive Secretary of the American College of Neuropsychopharmacology.

George M. Simpson, M.D. was Professor of Psychiatry and Pharmacology, Director of Clinical Psychopharmacology, Medical College of PA/EPPI. He was a member of the ACNP Task Force on Guidelines for Clinical Evaluation of Psychotropic Drugs, and served as President of the ACNP in 1991. He has conducted research in psychopharmacology, particularly in schizophrenia, for over thirty years and has published extensively. To this end, he was the recipient of the Alfred P. Noyes Award for contributions in the field of schizophrenia. Dr. Simpson serves as an Examiner for the American Board of Psychiatry and Neurology. He is a board certified psychiatrist.

APPENDIX II

GENERAL MANAGEMENT POLICY STATEMENT

GENERAL MANAGEMENT POLICY STATEMENT

All six ACNP panel members (three psychologists and three psychiatrists) will make observations and collect other data required to perform **Tasks A-G** by three principal methods: (1) site visits; (2) off-site evaluations; and (3) examinations. Task A: annual assessment of the individual competence of the graduates; Task B: annual comprehensive examination; Task C: mid-year intermediate exam; Task D: test development and revision; Task E: annual site visits to duty stations of the graduate; Task F: mid-year off-site evaluations; Task G: integration of information and data from Tasks B-F to assess the overall competence of the program design. They and the Executive Secretary will participate in the annual site visits to the duty stations of the graduates (**Task E**). The site visits will begin and end with executive sessions for task assignments, clarification and adjustments of details of the visit protocol, exchange of impressions, and a listing of specific concerns and issues which need to be covered. Each panelist will take detailed notes about the events of the visit—interviews, case presentations, conferences, caseload statistics, and case records reviewed. Within a few days following a visit, each panelist will prepare a narrative report, concluding with an interpretive, integrative, commentary and specific recommendations. Then, the Executive Secretary (or a designated panelist) will draft the combined report integrating the individual perspectives. The draft will be circulated to all panelists for reactions and approval, with telephone conferences utilized as needed to resolve issues, reach consensus, and expedite completion of the final version.

Coordination of panelists will be similar for the mid-year off-site evaluations (**Task F**). At least four panelists (two psychologists and two psychiatrists) and the Executive Secretary will participate in each such event. The centerpiece will be a teleconference with the graduate and the supervisor. In preparation for each teleconference, each panelist will receive and review a standard packet of documents (caseload statistics, a sample of case notes (on at least 15 cases), and rating scale and narrative evaluations by supervisors). Panelists will assemble at an agreed upon time at local units of teleconference networks. They will follow structured protocols (with free question and discussion periods) for interviewing the graduate and the clinical supervisor. This standard set of documents and structured interview protocols constitute the important "standard set of questions" component of **Task F**. Procedures for preparing the reports of off-site evaluations will be the same as for site visits.

Concerning the annual comprehensive examinations (**Task B**) and the mid-year intermediate examinations (**Task C**), the test development and revision stages (**Task D**) primarily require management by the Executive Secretary working from the ACNP Central Office with the panelists at their usual locations. Telephone, fax, e-mail, regular mail, and overnight express mail are the main tools required for communicating and handling the flow of documents involved in collecting, selecting, and editing pools of test items representative of the domains of competence to be assessed. For the annual comprehensive examinations, the graduates and the panelists will assemble at WRAMC where the individual oral examinations will be completed in one day. The Executive Secretary, or a panelist designate, will administer and monitor the

objective test and the essay test the day before or the day after the orals. Copies of the essays will be overnight mailed to the panelists for grading according to specific criteria. The mid-year, intermediate examinations will be expressed to the graduates' clinical supervisors to be administered simultaneously under standard conditions at the various duty stations.

Tasks A and **G** will be performed annually after all site visits, off-site evaluations, and examinations have been completed. **Tasks A** and **G** require the integration of information and data from **Tasks B, C, E,** and **F**. In the case of **Task A**, the focus is an annual assessment of the individual competence of the graduates in the years after completion of their PDP fellowships. A single document will include a separate sub-report evaluating each of the 10 graduates. In the case of **Task G**, the focus is the design of the entire program with foci to be selected annually in consultation with the COR. Each panelist will have assignments on each task, such as integrating the information from all sources pertaining to the overall competence of a specific graduate (**Task A**) or an aspect of the program design (**Task G**). The drafting and revision of the final reports will be coordinated as described above for the site visits.

APPENDIX III

ACNP CONSENSUS STATEMENT

"PRESCRIBING PRIVILEGES FOR NON-PHYSICIANS IN THE MILITARY"

Prescribing Privileges for Non-Physicians in the Military

ACCEPTED AS A CONSENSUS STATEMENT BY THE ACNP COUNCIL MARCH 22, 1991

Published: ***Neuropsychopharmacology*** **1991, Vol. 4, No. 4; pages 290-291**

The American College of Neuropsychopharmacology (ACNP), founded in 1961, is an interdisciplinary professional organization composed of leading scientists throughout America engaged in the promotion of health, and research on the causes and treatment of diseases affecting emotions and behavior, including the addictive disorders. Members are elected primarily on the basis of their original research contributions to the field of neuropsychopharmacology, which includes evaluation of the effects of natural and synthetic compounds upon the brain, mind, and human behavior. Membership of the ACNP includes: psychiatrists, neuroscientists, psychologists, pharmacologists, and research related health care professionals.

The ACNP has no quarrel with the concept that non-physicians may serve a useful role in society with regard to the use of medications as part of medical care, provided that such professional personnel have had the proper training and clinical experience to perform these tasks with skill and competence. We are concerned both with the availability and quality of such care.

In considering the potential value, for example, of clinical psychologists as drug prescribers, it is useful to consider on the one hand what would have to be done to supplement the training of psychologists who already have their Ph.D.'s, and on the other hand, what one would do were one to design a training program from "scratch" for candidates entering a training program intended to turn out a "new breed" of psychologist.

What follows is a description of our view of the minimum background and training necessary to fulfill the expectation that patients treated with drugs by non-physicians would receive a high quality of pharmacotherapeutic care.

It must be acknowledged and recognized that:

1) there are no medications prescribed for the treatment of mental disorders and stress-related dysfunctional behaviors whose actions are limited to the central nervous system (CNS);

2) many military personnel and their dependents may be receiving other prescribed (e.g., antihypertensives, oral contraceptives) and non-prescribed (a friend's painkillers, or sedative hypnotics, vitamins or amino acids) medications or using substances such as alcohol, caffeine, nicotine or drugs of abuse (e.g., cocaine) which have actions in the CNS; and

3) many medications and other substances may effect the gut's ability to absorb, the liver's ability to metabolize, and the kidneys' and liver's abilities to eliminate medications targeted at the CNS (e.g., cimetidine, antacids, vitamin C).

Because of these facts, it is essential that any clinician authorized to prescribe CNS active medications have extensive training and demonstrated knowledge in basic and clinical pharmacology, including--but not limited to--pharmacokinetics and pharmacodynamics, mechanisms of drug action, side effects, drug interactions, compliance, effects of age and sex, and effects in normal versus pathological states. This is likely to require a minimum of two semesters of course work and laboratory experience ***in basic and clinical pharmacology.***

Any proposed training program needs to delineate the size of both the core and adjunct faculty positions and the roles required to operate such a program. Minimal criteria and standards of expertise and competence for each position must be stated, including duration and range of training, degree requirements (if any), and licensing and/or board credentials. Similarly, the credentials of the psychiatrist-supervisors should specify the degree and extent of requisite specialized training and experience in clinical psychopharmacology, including experience in problems germane to the military and their dependents.

For a successful new program or a retraining program, it will be essential to select trainee psychologists with an adequate background for advanced training in psychopharmacology. Two areas are particularly important--a preparatory science background and competence in clinical nosology. In order to study pharmacology at the advanced level needed to manage pharmacotherapies, trainees must have a background in chemistry, biology and mathematics. Chemistry should include post-baccalaureate biochemistry and the necessary preparation for a course at this level. Typically, this would include undergraduate general and organic chemistry. Biology should include undergraduate level general biology, vertebrate and human anatomy, and other course work adequate for a post-baccalaureate level course in mammalian physiology. It would be important for the graduate physiology course to contain exposure to human pathophysiology. It would also be essential that trainees have an adequate background in the biological basis of behavior. Understanding of clinical pharmacokinetics and many relevant biochemical phenomena requires a background in mathematics, including at a minimum, college-level algebra.

The other area in which an adequate background must be required is in diagnostic nosology. Familiarity with various diagnostic schemata is essential for adequate care and treatment. Since there is wide variability in course content and clinical experience in psychopathology in graduate psychology programs, it may be advisable to develop an entrance examination which focuses on the nosology of mental disorders.

Any training setting must provide supervised exposure to the management of the requisite patient population essential to comprehensive training in clinical psychopharmacology. Not only would the mental disorders most often encountered by military psychologists need to be represented (e.g., affective, cognitive and substance abuse disorders), but also the range of co-morbid disorders, including important axis II diagnoses, could profitably be included. Patients should be seen over a sufficiently extended period of time and under supervision to provide an understanding of the natural course of mental disorders and the impact of medications at various stages of illness. Further, comprehensive clinical training must encompass variations in pharmacokinetics, organ functioning, drug interaction, and side effects. This requires the availability of clinical disorders across the life cycle, including child and adolescent, as well as geriatric populations.

In order to ensure a basic level of clinical competence, the non-physician-prescriber candidates should be required to meet a general, standardized level of diagnostic and prescriptive competence. Candidates should be required to pass national examinations designed to assess basic principles, the ability to diagnose accurately, and the capacity to prescribe with safety and efficacy. These competency examinations should be modeled on the relevant modules of the National Board of Medical Examiners examinations and should reflect the standards of clinical care determined to be at least minimally appropriate.

We could not approve and would question the educational soundness of any "crash" or "cram" course format. Ample evidence exists that retention of usable knowledge from such formats is very limited.

Although the present proposal directly addresses, as an example, the training of clinical psychologists in preparation for limited prescribing privileges, other professionals might be appropriate for this type of training. For example, psychiatric nurses who hold a masters in the Science of Nursing (M.S.N.) might be an appropriate group since their prior clinical and academic training would provide them with some of the minimal entry requirements (i.e., background basic sciences) necessary to proceed with a more advanced curriculum. Another group that might especially benefit from additional training in psychopharmacology would be M.D. practitioners who thus far have not had much clinical experience in psychiatric treatment. Given the Government's position that an oversupply of physicians exists, this group should be readily available to increase the number of individuals trained to provide psychiatric treatment. Finally, another group of professionals might be those with a doctorate in Clinical Pharmacy. Here, additional training in diagnosis and clinical care and in other nonpharmacological treatments (i.e., behavior therapy) would be necessary if this group were to be involved in the prescription of psychotropic compounds.

APPENDIX IV

SITE VISIT SCHEDULES
(AT MILITARY INSTALLATIONS)

AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY FELLOWS SITE VISIT
12 MARCH 1998

Thursday, 12 March 1998
Site #4
PDP Graduate: BC

Time	Action	Location
0730-0830	Record Review (14 Records for Review)	TBA
0830-0930	Meet with Graduate BC	
0930-1030	Meet with Clinical Supervisors CAPT Eduardo Berdecio Head, Mental Health Dept. LCDR Matthew Carroll Head, Alcohol Rehab. Dept. & Staff Psychiatrist	
1030-1130	Meet with Admin. Supervisor CAPT Michael Mottet, Director for Medical Services	
1130-1145	Exit Interview with Graduate BC	
1200	Depart	

AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY FELLOWS SITE VISIT
13 MARCH 1998

Friday, 13 March 1998
Site #5
PDP Graduate: BA

Time	Action	Location
0900-1000	Record Review (14 Records for Review)	3rd Floor
1000-1100	Meet with BA	3rd Floor
1100-1130	Meet with CAPT Richard Jefferies	
1145-1215	Meet with CAPT Ju Ho Mental Health Department	3rd Floor
1215-1315	Lunch and Exit Interview with BA	Hospital Dining Facility
1330	Depart	

SITE #6
AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY DEMONSTRATION PROJECT
GRADUATE SITE VISIT
MONDAY, 20 APRIL 1998

PDP Graduate: AD

Time	Action	Location
0930-1030	Records Review	**2nd Floor Conference Room**
1030-1130	Meet with AD	**Same**
1130-1200	Meet with MAJ Humphreys Chief, Outpatient Psychiatry Svc Proctor	**Same**
1200-1300	Executive Session	**Same**
1300-1330	Meet with COL Thomas, Ch., Psychology Dept MAJ Southwell, Dir of Trng, Psychology Residency Prog	**Same**
1330-1345	Break	
1345-1400	Movement to large medical center in the Southeast - Site #6	
1400-1430	Meet with: COL Moore, Dep Cmdr for Clinical Svcs COL Sheehan, Chief, MH Directorate & Chief, Psychiatry & Neurology Svc COL Heath, Chief, Pharmacy Svc	**4th Floor Conference Room**
1430-1445	Outbriefing with AD	**4th Floor Conference Room**

SITE #7
AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY DEMONSTRATION PROJECT
GRADUATE SITE VISIT

WEDNESDAY, 22 APRIL 1998
Building 215, 9A Solarium

PDP Graduate: CD
Schedule Contact: CAPT Cross (Phone: 757-314-6745)

Time	Action
0720	Meet ACNP visitors at Site #7, Bldg 215 - CAPT Cross
0730	Record Review - ACNP
0800	Preliminary Interview with CD
0830	CDR Stewart - proctor
0900	CAPT Knowlan - Head, Psychiatry
0945	Break
1000	Interview with CD
1100	Chair, Credentials Committee - CDR Wall
1115	Chair, Pharmacy and Therapeutics Committee - LCDR Egland
1130	Exit Interview with CD
1200	Lunch (CAPT Cross' office arranging)
1300	Depart

SITE #8

THURSDAY, 23 APRIL, 1998
MORNING

PDP Graduate: AA

Sessions will be held in Room 7143, 7th Floor

0730	Charts Review
0830	Interview with AA
0930	Meet with Supervisors CAPT Ron Smith
1030	Meet with Director of Clinical Services and Department Chiefs for Program Evaluation CAPT Wade, CDR Dinneen, and CAPT Glogower
1130	Exit Interview with AA
1200	Depart

SITE #9

AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY DEMONSTRATION PROJECT
GRADUATE SITE VISIT

THURSDAY, 23 APRIL 1998
AFTERNOON

PDP Graduate: AB

Time	Action	Location
1300-1400	Records Review	TBA
1400-1500	Interview with AB	TBA
1630	Conference Call Clinic Phone: 254-618-8134	TBA
1800	Depart	

THE PENTAGON
WASHINGTON, D.C.

AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY
PSYCHOPHARMACOLOGY DEMONSTRATION PROJECT

FRIDAY, 24 APRIL 1998

PDP Graduate: AB

Time	Action	Location
0900	Meet CDR Mark Paris	South Entrance to The Pentagon Washington, D.C.
0900-1000	CDR Mark Paris Senior Political Analyst in AA Office for Health Affairs Office The Pentagon, Washington, D.C.	TBA
1000-1300	Transport to Site #9 and Lunch	
1300-1400	COL Karl (Skip) Mo LTC Molly Hall Chief, Mental Health Flight MAJ Tim Lacy, Proctor	Conference Room @ Site #9
1400	Depart to National Airport	

APPENDIX V

MEDICAL RECORDS CHECKLIST

MEDICAL RECORDS CHECKLIST

PDP Graduate: _____ Date:_____

ACNP Panelist: _____

This is the _____(1st,2nd, 3rd,etc) of this Graduate's charts I have reviewed.

Please Use Reverse Side For Comments

****

Principal DX: _____ Admission date: _____ Discharge date: _____

	YES	NO
HISTORY/PHYSICAL		
...pertinent to clinical condition/present illness?	___	___
...physical complete and gender and age specific?	___	___
...working DX correlates with history, physical, & ancillary studies?	___	___
...treatment plan pertinent to working diagnosis?	___	___
...staff physician note within 24h concurring with initial TX plan?	___	___
GRADUATE'S PROGRESS NOTES		
... adequately reflect Pt condition and progress?	___	___
... consistent with other care providers?	___	___
... at least 50% show time?	___	___
... acknowledge indicated test results (x-ray, labs, consults)	___	___
...supervising or other psychiatrist noted concurrence with TX plan?	___	___
CONSULTATIONS		
...were ordered when indicated?	___	___
...reflected pertinent information about Pt condition?	___	___
ORDERS		
...at least 50% timed?	___	___
...DX and TX measures other than those ordered were indicated? (specify)	___	___
DISCHARGE SUMMARY, CONCLUSIONS		
...reflects significant clinical findings and course of TX?	___	___
...describes Pt condition at discharge?	___	___
...lists all diagnoses in full?	___	___
...the principal DX is supported by the record?	___	___
OVERALL ASSESSMENT OF DOCUMENTED RECORD		
...sufficient to review continuity and consistency of care?	___	___
...sufficient to reflect supervision & familiarity with Pt's condition?	___	___

APPENDIX VI

SEMI-STRUCTURED GUIDES FOR INTERVIEWS (4)

SEMI-STRUCTURED GUIDE FOR INTERVIEWS WITH PDP GRADUATES

Back of pages may be used if more space is needed. Be sure to number your answers.

1. TYPICAL PRACTICE: Begin by describing in detail your activities and performance for the past week, including today:

   a) how many new patients?

   b) how many old or continuing cases?

   c) what services did you work on and how much time on each?

   d) how much time with your psychopharmacology supervisor and how many patients discussed?

   e) how much other supervision and its nature?

   f) what proportion of your new and continuing (ask about each) patients require psychopharmacotherapy, and are you the provider?

   g) what staff meetings, conferences did you attend and what was the nature of your participation?

   h) what CE experiences, particularly psychopharmacological, have you had this week?

   i) what else did you do this week that we have not covered?

   j) what have you done this week that you could not have done without the PDP training and post-graduate experience?

   k) do you know of any adverse effects that occurred this week as a result of your actions (or failure to act)

2. TYPICAL PRACTICE: Now, was the week just discussed typical and representative of your activities and duties since you were assigned to this station?

a) if not, what would a more representative week be like with respect to the above details? (Go over each point.)

b) are there other ways than in the above details that your typical work differs?

3. PRIVILEGES, SCOPE OF PRACTICE, FORMULARY: Next, let's discuss your privileges, scope of practice, and formulary.

a) do they spell-out a structure that facilitates and provides you ample opportunities to apply and practice your skills as a prescribing psychologist?

b) what problems are there? Are there unreasonable limitations or restrictions on your practice? (Record specifics.)

c) are there other changes that you would recommend be made now or in the near future in your privileges, scope of practice, or formulary?

4. GOALS: As a clinical psychologist with prescription privileges, what are your major duties and responsibilities at the station?

a) what are your main goals or objectives of your practice?

b) what do you want to accomplish, and rate your progress to date?

c) how would you state or describe the general aims of the PDP?

d) how do your personal goals fit with the general objectives of the PDP? are they consistent or inconsistent, or both? (Record details.)

5. PRESCRIPTION PRIVILEGES: You have now had prescription privileges for some period of time. Is the value of your services to the MHSS (Military Health Services System) enhanced as a result?

a) in what major ways? provide examples.

b) what are the principal differences between your pattern of practice before and your pattern after prescription privileges?

c) has your presence on the staff changed the practice of clinical psychology, psychiatry, or other health care providers at this station? (Details.)

d) ..do you personally administer psychological tests and measures more/about the same/less than before your PDP training? and do you now refer more/about the same/fewer patients to other psychologists for tests and measures?

e) compared with your nonprescribing psychologist colleagues, do you do more/about the same/less psychological testing/assessment as part of your practice?

f) has the possession of prescription privileges impacted the establishment or maintenance of therapeutic alliances with your patients? (Record examples of positive or negative instances.)

g) have you altered your theoretical beliefs about the etiology of mental disorders and mechanisms of change as a result of your PDP training and subsequent practice?

6. SUPERVISION: What arrangements do you have with your supervisor?

   a) what is the nature and quality of your relationship with your supervisor?

   b) do you follow specific guidelines or have a less formal arrangement?

   c) how much supervision time did you receive this past week, including today?

   d) how much supervision do you usually obtain? (hours/week)

   e) what decisions must be discussed with your supervisor?

   f) what decisions must have be approved in advance by your supervisor?

   g) how would you characterize the current degree of independence of your prescribing psychologist practice? e.g., how much independent judgment do you exercise, compared with a newly post-resident psychiatrist? (or, compared with the average staff psychiatrist at this station?

7. PATIENT OUTCOMES: How does this station/service assess patient satisfaction with treatment?

   a) what proportion of your patients report some degree of satisfaction with treatment? Can you make stronger statements, such as what proportion are extremely satisfied with the results of treatment?

   b) are you more effective with particular types of patients or particular diagnoses and problems than others? (Details.)

   c) are you less effective with some patient types or conditions? (Details.)

8. CONTINUING EDUCATION: What formal CE or CME programs have you participated in since July 1, 1997? How many accumulated credits?

   a) what professional journals do you read regularly?

   b) what books since July 1?

   c) do you have access to the Internet? If yes, how do you use it professionally?

   d) what specific areas of research do you try to track?

February 1998

DOCUMENTS TO BE PROVIDED AT SITE VISITS

1. Statement of Privileges
2. The Formulary
3. Scope of Practice
4. Supervisory Guidelines
5. Case statistics since the graduate arrival at this station.
6. 14 Randomly Selected Medical Records/Charts of Patients Treated in the past 3 months.
7. Copies of most recent written evaluations of Fellow by clinical supervisor/monitor and Chief of Psychology/Psychiatry/Primary Care.
   Include performance rating scales if applicable.
8. Information brochures about the military base, the medical facility, the psychology and psychiatry services, and any other service where the Fellow has duties.

GUIDES FOR INTERVIEWS WITH CLINICAL SUPERVISORS

[This guide is designed for the interview with the principal clinical supervisor or monitor of the Graduate's psychopharmacology practice, but it may be adapted for use with other supervisors, such as chiefs of clinical services.]

1. SUPERVISION: What supervisory arrangements do you have with the Graduate?

   a) what is the nature and quality of your relationship with the Graduate?

   b) do you follow specific supervisory guidelines or have a less formal arrangement?

   c) how much supervision time did you provide this past week, including today?

   d) how much supervision do you usually provide? (hours/week)

   e) what decisions must be discussed with you?

   f) what decisions must have your advance approval?

   g) how do you evaluate the effectiveness of your supervision?

   h) how would you characterize the current degree of independence of the Graduate's prescribing psychologist practice? e.g., how much independent judgment does the Graduate exercise, compared with a newly post-resident psychiatrist?

   i) what reservations, if any, do you have about the medical safety of the Graduate's practice as currently structured and limited? what would be your reservations if the Graduate had the same structure and limits as the average military psychiatrist?

2. SCOPE OF PRACTICE, PRIVILEGES, FORMULARY: Are there changes that you would recommend in any of these documents? (Record specific changes and reasons.)

   a) in what ways, if any, do prescribing privileges add to the value of the Graduate's work as a service provider?

3. IMPACT OF THE PDP: Has the Graduate's work affected the overall quality of care at this facility? In what respects? (Record examples.)

a) what changes have there been in the pattern of delivery of services?

b) .... in the collaboration between psychiatry and psychology?

c) .... In the collaboration between psychology and primary care or other services?

d) considering the PDP and the Graduate as representative of its product, is the program working or not working at this station? how effectively?

e) what has been its impact? please describe its achievements? and its nonachievements?

f) have there been demonstrable net savings? or net extra costs?

g) what were the problems getting it going? what progress has been made? what remains to be done?

h) what procedures and processes are in place to support and foster the development of the PDP?

i) what are the key elements to making it work?

j) what changes, improvements can you suggest?

4. PATIENT OUTCOMES: How does this station/service assess patient satisfaction with treatment?

a) what proportion of the Graduate's patients report some degree of satisfaction with treatment? Can you make stronger statements, such as what proportion are extremely satisfied with the results of treatment?

b) is the Graduate more effective with particular types of patients or particular diagnoses and problems than others? (Provide Details.)

c) is the Graduate less effective with some patient types or conditions? (Provide Details.)

5. PDP GRADUATE OUTCOMES: Please rate the Graduate's current status and performance as **Less than Satisfactory/Minimally Satisfactory/More than Satisfactory/Extremely Satisfactory** on the following dimensions. Please feel free to qualify your judgments.
Does the Graduate...

a) know the diagnostic indications/contraindications for psychopharmacological treatments and adjuncts to treatment?

b) know how to initiate and terminate pharmacotherapy components of treatment?

c) understand the differences between the acute and maintenance applications of psychopharmacology?

d) understand how comorbid presentations of Axis III disorders impact the use of psychopharmacological interventions?

e) understand how comorbid Axis III disorders impact differential diagnostic decision making and require referrals to establish presence/absence?

f) know the major classifications and groupings and mechanisms of action of psychopharmacological agents, including the efficacy of complementary drug classes?

g) know the pharmacokinetics and physiological effects of the agents in the formulary?

h) know the drug dosages and timing of dosages of agents in the formulary?

i) know the drug-drug interactions and drug-drug combination therapies of agents in the formulary?

j) know the side effects of the agents in the formulary and the required management-referral-consultation process?

k) know the required laboratory monitoring and is the Graduate proficient in interpreting the lab results for specific agents, including drug levels?

l) recognize signs and symptoms of overdose and abuse, and is the Graduate able in managing problems of noncompliance?

m) know the basic neurobiology of behavior, including the neuromodulators and neurotransmitters, and the neuroreceptor mechanisms?

n) know the neurobiological hypotheses of mood disorders, schizophrenia, and anxiety?

o) understand the ethical issues in the use of psychopharmacology, including the appropriate procedures for informing/educating patients in the use of psychopharmacological agents?

GUIDES FOR INTERVIEWS WITH SERVICE CHIEFS OR ADMINISTRATIVE SUPERVISORS

1. IMPACT OF THE PDP: Has the Graduate's work affected the overall quality of care at this facility? In what respects? (Record examples.)

   a) what changes have there been in the pattern of delivery of services?

   b) .... in the collaboration between psychiatry and psychology?

   c) .... In the collaboration between psychology and primary care or other services?

   d) considering the PDP and the Graduate as representative of its product, is the program working or not working at this station? how effectively?

   e) what has been its impact? please describe its achievements? and its nonachievements?

   f) have there been demonstrable net savings? or net extra costs?

   g) what were the problems getting it going? what progress has been made? what remains to be done?

   h) what procedures and processes are in place to support and foster the development of the PDP?

   i) what are the key elements to making it work?

   j) would you like to have additional prescribing psychologists working at this station?

2. SCOPE OF PRACTICE, PRIVILEGES, FORMULARY: Are there changes that you would recommend in any of these documents? (Record specific changes and reasons.)

   a) in what ways, if any, do prescribing privileges add to the value of the Graduate's work as a service provider?

   b) do you have information about how the Graduate and the Graduate's work are viewed by chiefs of services and chairs of committees such as credentials and P&T?

3. PATIENT OUTCOMES: How does this station/service assess patient satisfaction with treatment?

a) do you have any information about what proportion of the Graduate's patients report some degree of satisfaction with treatment? Can you make any stronger statements about the Graduate's treatment results?

b) or about how the Graduate's results compare with other staff?

GUIDES FOR INTERVIEWS WITH STATION COMMANDERS OR MEDICAL FACILITY DIRECTORS

1. IMPACT OF THE PDP: Has the Graduate's work affected the overall quality of care at this facility? In what respects? (Record examples.)

   a) what changes have there been in the pattern of delivery of services?

   b) .... in the collaboration between psychiatry and psychology?

   c) .... In the collaboration between psychology and primary care or other services?

   d) considering the PDP and the Graduate as representative of its product, is the program working or not working at this station? how effectively?

   e) what has been its impact? please describe its achievements? and its nonachievements?

   f) have there been demonstrable net savings? or net extra costs?

   g) what were the problems getting it going? what progress has been made? what remains to be done?

   h) what procedures and processes are in place to support and foster the development of the PDP?

   i) what are the key elements to making it work?

   j) would you like to have additional prescribing psychologists working at this station?

2. SCOPE OF PRACTICE, PRIVILEGES, FORMULARY: Are there changes that you would recommend in any of these documents? (Record specific changes and reasons.)

   a) in what ways, if any, do prescribing privileges add to the value of the Graduate's work as a service provider?

   b) do you have information about how the Graduate and the Graduate's work are viewed by chiefs of services and chairs of committees such as credentials and P&T?

3. PATIENT OUTCOMES: How does this station/service assess patient satisfaction with treatment?

   a) do you have any information about what proportion of the Graduate's patients report some degree of satisfaction with treatment? Can you make any stronger statements about the Graduate's treatment results?

   b) or about how the Graduate's results compare with other staff?

4. The pattern throughout the military has been to assign these graduates to psychiatric services. This has facilitated supervision and provided a frame of reference. Could you comment on other possible assignments where these clinicians might prove useful, indicating advantages and potential problems?

Note on Redactions:

The following sites were visited by the Panel Members of the ACNP:
MGMC, Andrews AFB, MD
NNMC, Bethesda, MD
Bremerton NH, WA
Eglin AFB, FL
Fort Gordon, GA
Fort Hood, TX
Keesler AFB, MS
Camp Pendleton, CA
The Pentagon, Arlington, VA
NMC Portsmouth, VA
Uniformed Services University Health Science, MD
Walter Reed Army Medical Center, MD